CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS.

New York, September 1, 1910.

CONTENTS.

CONSTRUCTION NEWS:
- Railways 95
- Electric Railways 95
- Light and Power Plants 96
- Bridges 97
- Buildings 97
- Water Supply and Irrigation 99
- Sewerage 99
- Garbage Disposal 100
- Streets and Roads 100
- Manufacturing Plants 102
- Miscellaneous Contracts 102
- U. S. Possessions and Cuba 103
- Foreign Contracts 103
- Contract Prices 103-108
- Plans and Specifications on File 104
- List of Contracts Pending 104

EXAMINATIONS 104

CURRENT PRICES OF ENGINEERING MATERIALS 105

INDUSTRIAL NOTES 109

TRADE PUBLICATIONS 109

PROPOSALS 110

IMPORTANT WORK NOTED IN THIS ISSUE.

Railways.

Canadian Northern Ry.
Halifax & Eastern Ry.
Gulf & Magnolia R. R.

Electric Railways.

North Yakima, Wash.
East St. Louis, Ill.

Light and Power Plants.

Power-house, Frederick, Md.
Power plant, Parkersville, Tenn.
Transmission, Kansas City, Mo.

Bridges.

Superstructure. Saybrook, Conn.
Bridge, Reading, Pa.
Bridge, Council Bluffs, Iowa.

Buildings.

Building impvt., Manchester, N. H.
Mandel Bros. Bldg., Chicago, Ill.
Office building, Houston, Tex.
Theater and office bldg., Wash., D. C.

Water Supply—Irrigation.

Pumping engines, Parkersburg, W. Va.
Reservoirs, Fort Collins, Colo.

Sewers.

Sewer, Chicago, Ill.
Sewer, San Francisco, Cal.
Sewer, Colton, Cal.
Sewer, St. Charles, Ill.

Streets and Roads.

Paving, Trenton, N. J.
Roads, Hartford, Conn.
Paving, New York.

Garbage Disposal.

Garbage disposal plant, El Paso, Tex.

Manufacturing Plants.

Lackawanna Steel Co., Buffalo, N. Y.
Liquid Carbonic Co., Memphis, Tenn.
Deere & Co., Welland, Ont.

Miscellaneous.

Tunnel, Tunnelton, W. Va.
Clearing and filling, Aberdeen, Wash.
Canal, Mexico City, Mex.

RAILWAYS.

ALABAMA & VICKSBURG.—The directors have authorized an increase in capital. It is stated that at least $1,000,000 will be spent in improvements on its lines in Mississippi during the current year. This road is 112 miles long and is part of the Queen & Crescent Route. A. A. Woods is Res. Engr., Vicksburg, Miss.

ARKANSAS.—Survey is being made by John T. Edwards, Wheetley, Ark., for a railroad five miles long for the Indiana & Arkansas Lumber & Mfg. Co. The road will be standard gage and 40-lb. rails will be used.

BALTIMORE & OHIO RAILROAD CO.—Official advices are to the effect that the contract for the new tunnel between Grafton and Rollinsburg, Preston Co., W. Va., has been awarded to BENNETT & TALBOTT, Greensburg, Pa. This tunnel will be double track, 14 ft. centers and 4,250 ft. long. The tunnel is constructed parallel to the old one, south about 80 ft. and at a lower grade. The old tunnel will be used for Westbound traffic only.

BRITISH COLUMBIA & ALASKA.—Plans are being made to build from Vancouver, B. C., north via Litton and Fort George, to the northern boundary of British Columbia. The company has under consideration the question of building a line via Telegraph Creek to Skagway, Alaska. J. Wolgenstein is Pres., Seattle. H. G. Villard is also interested.

CANADIAN NORTHERN.—Company has applied to the Dominion Government at Ottawa, Ont., for a charter for a railway to run from Edmonton, Alta., to Bear River, on Portland Canal, B. C. The Portland Canal is part of the British-Alaska boundary. The road will give the Canadian Northern a haul to tide water. M. H. MacLeod, Winnipeg, Man., is Gen. Mgr.; T. Turnbull, Winnipeg, is Asst. Ch. Engr. Noted on July 28.

M. H. McLeod, Gen. Mgr., is quoted as saying that the Grand Trunk Pacific will enter Calgary along the right-of-way of the C. N. R. There will be a joint station. Mr. McLeod says his company is preparing to spend $1,500,000 on the station, right-of-way and construction in Calgary. Negotiations with the City Council are being carried on.

CENTRAL OF GEORGIA.—Engineers are in the field making surveys and locating a line from a point a little south of Andalusia, Ala., in the direction of Pensacola, and another line in a westerly direction, in all probability to New Orleans. C. K. Lawrence is Ch. Engr., at Savannah, Ga.

COAL & COKE RY.—A party of engineers under the direction of R. H. Pembroke, Ch. Engr., Elkins, W. Va., is at Beaverhole on the Cheat River, and is said to be making a survey for a line that will connect the Coal & Coke with the Morgantown & Kingwood at Morgantown, W. Va. It will then run over the Morgantown & Kingwood as far as Trowbridge and then branch off down the Cheat River to the junction of the Cheat and Monongahela, at Point Marion.

CRYSTAL CITY & GARDENDALE R. R.—Official advices are to the effect that the grading is practically completed on the line from Crystal City, Tex., to Gardendale, 41 miles. The track laying will be done by company forces. U. E. Franklyn is Pres., and Ernest R. Breaker, Ch. Engr. Noted on Aug. 18.

EL PASO & SOUTHWESTERN.—H. J. Simmons, Gen. Mgr., states that the road will probably build from Benson to Tucson and Phoenix, Ariz., if the cost of building is not too much. Engineers are in the field, but construction has not been fully decided upon. The Los Angeles "Times" states that surveys have been completed for an extension of line from Benson to Winkelman.

GULF & MAGNOLIA.—A line, 125 miles long, will be built from Junction City to De Queen, Ark., via Magnolia, Ark., Waldo, Bodcaw, Hope, Columbus, Mineral Springs and Lockesburg. The country is slightly rolling. The company not yet ready to name date for receiving bids. The directors are: Pres., S. Q. Sevier; Vice-Pres., J. H. Beck, both of Hope, Ark.; Treas., J. L. Davis, Magnolia, Ark.; Secy., P. A. Tharp; N. Y. Foster, both of Hope; J. M. Witt and Henry Stevens of Magnolia; Charles Clark and C. A. Kennedy, of Waldo.

HALIFAX & EASTERN RY.—We are officially advised that the surveys have been completed and the right of way secured for a new line from Halifax to Guysboro and New Glascow to Country Harbor, in all, 204 miles. The contracts will be let next year. John Bogart Bartrane, Toronto, Ont., is Prest., and William Hendry, Halifax, N. S., is Ch. Engr. Noted Aug. 18.

LAKE ARTHUR, JENNINGS & NORTHERN.—The Jennings Construction Co., capital $500,000, has been chartered at Lake Charles, La., to build the Lake Arthur, Jennings & Northern from Lake Arthur to a junction with the Frisco.

LEWISBURG & NORTHERN.—A charter has been filed for this company, with $100,000 capital, to build a line from the Alabama boundary in Gile County, Tenn., north to Sumner County. The incorporators are R. C. Armstrong, C. C. Houston, J. A. Hardison, Lewisburg, Tenn., Alexander Austin Elkton, and D. C. Sherrell, Delrose, Tenn. The entire line will extend from Athens, Ala., to Brentwood, Tenn., via Elkton and Lewisburg. The Louisville & Nashville is stated to be interested.

LICKING RIVER R. R.—The officials of this road intend to convert it to a standard gage line and to extend it. At present it is 50 miles long. J. A. McLeay is Pres., Fourth National Bank Bldg., Atlanta, Ga.; J. B. Shaw, of Yale, Ky., is Gen. Mgr.

MIDLAND PENNSYLVANIA R. R.—The line will extend from Ashland, to Millersburg, Pa., a distance of 44 miles, and will run through the towns of Gordon, Hegins, Taylorsville, Mabel, Weishample, Valley View, Sacramento, Springville, Gratz, Berrysburg and Killinger. At Millersburg connection will be made with the Northern Central, and at Ashland with the Reading and the Lehigh Valley. The company is capitalized at $2,000,000. Among those who are backing the enterprise are Finley Acker, former Judge Dimner Beeber, Pres. of the Commonwealth Title & Trust Co.; W. E. Harrington, Director of the Camden & Suburban Ry.; Samuel F. Houston, Vice Pres. of the Real Estate Trust Co., all of Philadelphia; C. Henry Stinson, Pres. First National Bank, Norristown, Pa.; J. K. Griffith, Gen. Mgr. Railway Steel Spring Co., Latrobe, Pa., and G. Genge Browning, a Director of the Camden & Suburban Ry., Camden, N. J. Noted April 21.

MINGO R. R.—Company, with a capital of $50,000, has received its charter from the State Department to construct a road from a point near Lenore, on Pigeon Creek, on the Tug Fork of the Big Sandy River in Mingo County, W. Va., to a point on the Gilbert Creek. The company's headquarters are at Charleston, W. Va.

MISSOURI INLAND & SOUTHERN.—C. H. Evers, of Seattle, Wash., has begun a new survey from Rolla to Houston, Mo., about eight miles. E. E. Young of Licking, Mo., is Pres. Noted June 23.

MISSOURI, KANSAS & TEXAS RY.—The contracts for grading at the Roy Yards, West Demsor, Tex., has been awarded to PATTON & GIBSON CO., LTD., Durant, Okla. This involves 500,000 cu. yds.

NEWTON NORTHWESTERN R. R.—Surveys have been started for the railroad from Newton, Miss., to Carthage, Miss., 42 miles. R. L. Ragland is Pres., and J. A. Kauffman, Callahan Block, Dayton, Ohio, Ch. Engr.

OKLAHOMA CITY & SOUTHWESTERN.—The Empire Construction & Finance Co., Scaritt Bldg., Kansas City, has been chartered under the laws of Delaware to build the Oklahoma City & Southwestern from Oklahoma City through the Texas Panhandle and the Pecos Valley in New Mexico, to El Paso, Tex., 525 miles. The incorporators are Marion Parks, M. Strickler and Robert Lemon, of Kansas City. Noted on March 10.

OTTAWA, RIDEAU VALLEY & BROCKVILLE.—Incorporated in Canada to build a 60-mile line from near Ironside, in the Township of Hull, Que., about five miles from Ottawa, Ont., south through Ottawa and the counties at Carleton, Grenville and Leeds to Brockville, Ont., on the St. Lawrence River, opposite Morristown, N. Y., where connection will be made by ferry with the New York Central Lines. The line is to be built to develop the ore mines at Ironsides. It is expected that contracts will be let soon. There will be one bridge about 400 ft. long over the Rideau River and some other short bridges, not exceeding 100 ft. each. The line will be about 20 miles shorter than the existing line. Extensive water power will be developed on the Batineau River about 2.5 miles from the mines. G. E. Kidd, 25 Sparks St., Ottawa, is Solicitor. Noted Aug. 11.

PORTERVILLE NORTHEASTERN RY.—We are officially advised that articles of incorporation were filed in Visalia, Tulare County, Cal., on July 25. The company is organized with a capital stock of $300,000 of which $18,500 has been subscribed. The incorporators are F. U. Nofziger, A. M. Coburn and G. W. Zartman. The purpose of the company is to build a steam road from Porterville to Springville, in Tulare County, a distance of about 16 miles, connecting with the Southern Pacific at Porterville. C. S. Freeland is Ch. Engr., with headquarters at Porterville.

QUANAH, SEYMORE, DUBLIN & ROCKPORT.—It is proposed to build about 500 miles of line from Quanah via Seymour, Dublin and Austin to Rockport, Tex. The company has headquarters in the Austin National Bank Bldg., Austin, Tex. About 5% of the country through which the line will run is rough and 20% rolling; the remainder is level. The directors are L. E. Walker, Pres., Marshall, Tex.; A. J. Ellers, Austin, Tex.; Harry Koch and Porter A. Whaley, of Quanah, Tex.; G. S. Plants, of Seymour, Tex.; M. C. Witcher of Dublin, Tex.; C. D. Johnson, of Rockport, Tex.; H. E. Ford and W. R. Davie of Austin, Tex. The Treas. is H. Pfaefflin, and W. L. Vining, Secy. Noted fully on April 28.

RIO GRANDE & EAGLE PASS.—It is probable that this road will be extended down the valley of the Rio Grande, from Laredo, Tex., to Sam Fordyce, where it will connect with the St. Louis, Brownsville and Mexico Railroad. The distance is about 125 miles. Preliminary surveys have been made of the route and the right of way for most of the distance obtained. The company operates between Laredo, and Minera, owning 28 miles of track. C. B. Wright, 142 South Third St., Philadelphia, Pa., is Pres.; R. W. Davis, Laredo, is Ch. Engr.

ROANOKE & MOUNT AIRY SOUTHERN.—This company will succeed the Roanoke & Bent Mountain it is stated. The latter company proposed to build from Roanoke to Floyd, Va., about 50 miles, but it is now determined to extend the line to Mt. Airy, N. C., making it altogether about 100 miles long. The officers of the Roanoke & Bent Mountain are A. L. Sibert, Pres.; R. H. Angell, Vice-Pres.; C. M. Armes, Secy., and Treas.; C. G. Ogden, Gen. Mgr., the other directors being W. C. Lawson, S. B. Pace, L. C. Stewart, J. Coles Terry, M. M. Caldwell, J. B. Botts and E. A. Thurman, all of Roanoke.

SAN DIEGO, EL PASO & ST. LOUIS.—Arrangements are being made to construct this line, to connect Quanah with El Paso, 305 miles distant. The surveys have been started.

SOUTHERN PACIFIC.—A survey is being run for a cutoff line between Giddings and Bryan, Tex., a distance of about 50 miles. The line would provide a new outlet for traffic destined to northern and eastern points, as it would connect the Houston & Texas Central, also a Harriman line, and the San Antonio & Arkansas Pass properties of the Southern Pacific. The line may eventually be extended southwest to the Southern Pacific at Sanderson, in Terrell County, in all about 250 miles. F. J. La Pierre, Houston, Tex., is Res. Engr., Houston & Texas Central.

TEXAS.—Trustworthy advices are to the effect that the projected line from Rotan to El Paso, Texas, have no backing from the large railways in that neighborhood and the newspaper advices are at least premature.

TEXAS.—The United States Reclamation Service has awarded the contract for building about ten miles of branch railway from a point five miles south of Engle, Tex., on the Atchison, Topeka & Santa Fe Ry., to the Engle Dam Site, to GEORGE B. BRADY of El Paso, Tex., at $51,280. This work involves the excavation of about 70,000 cu. yds of rock material and 6,500 cu. yds of overhaul. Contract for the erection of bridges on the road was awarded to BROWN & CONNOR, Tucumcari, New Mex., at $5,400. This work involves the placing of 400,000 ft. of lumber.

VALLEY PARK, ST. LOUIS & EASTERN.—Articles of incorporation have been issued in Illinois. The line is to be constructed from a point on the Mississippi River opposite St. Louis to a point on the Indiana state line in Iroquois County, with branch lines. The counties in which it is proposed to build are St. Clair, Madison, Bond, Jersey, Calhoun, Clinton, Washington, Jefferson, Marion, Fayette, Effigham, Moultrie, Douglas, Champaign, Ford, Monroe and Randolph. The capital stock is $100,000 and the incorporators and first Board of Directors are: W. C. Plass, St. Louis, Mo., Ormond B. Plass, St. Louis; Charles Neustadt, East St. Louis, Ill., John H. Suess, East St. Louis and Henry Schrader, Belleville, Ill.

VIDALIA & SOUTHEASTERN.—A charter has been applied for to build a line from Vidalia, Ga., on the Seaboard Air Line, via Reidsville, Glenville and Hinesville, to Fleming, Ga., on the Atlantic Coast Line, about 60 miles. The incorporators are F. K. Durden, H. J. Banks and J. V. Kelly, Vidalia, W. Y. McArthur, R. M. Garbutt, C. W. Braswell, A. Y. Garbutt, Montgomery; J. W. Poe, W. T. Jenkins, W. O. Donovan, Tattnall, and E. C. Miller, Liberty County.

WATERLOO, CEDAR FALLS & NORTHERN.—We are officially advised that surveys are being made for a new 30-mile line from Waterloo, Ia., to Grundy Center by way of Cedar Falls and Dyke. Contracts will probably be let some time in the spring of 1911. There will be some heavy work. L. S. Cass is Prest.; T. E. Rust, Ch. Engr. R. B. Shiphey, Locating Engr., may be addressed at 617 Mulberry St., Waterloo, Ia.

WHITE SULPHUR SPRINGS & YELLOWSTONE PARK.—Articles of incorporation for the White Sulphur Springs and Yellowstone Park Railway Company, have been filed with the Secretary of State at Helena, Mont., by John Ringling, Chicago; E. M. Calkins, Jr., Chicago, and Lewis Penwell, Helena. The road is to start at White Sulphur Springs and cross the Puget Sound line at Dorse, thence going to the northern boundary of the park. The capital of $300,000 is fully subscribed.

ELECTRIC RAILWAYS.

SARATOGA SPRINGS, N. Y.—The Hudson Valley Ry. Co., Glens Falls, has been granted permission by the Public Service Commission, Second District, at Albany, to exercise a franchise granted in Saratoga Springs, whereby the Glens Falls division is connected with the Waterford division. The company is allowed to construct its track over the Boston & Maine R. R., at grade, provided it constructs and maintains a trolley trough and derails in its track. D. E. Van Wirt, Glens Falls, is Ch. Engr.

AUBURN, N. Y.—The New York, Auburn & Lansing R. R. Co., running between Auburn, Merrifield, Venice, Genoa, Lansing and Ithaca, is arranging for the construction of a third rail electric system which the Ithaca-Auburn Power Co. recently made a part of its application before the Public Service Commission, Second District. H. A. Clark, Auburn, is Gen. Mgr. and Ch. Engr.

ELWOOD CITY, PA.—A company has just been organized that proposes the construction of a line from Park Gate to that city. An application for a charter has just been made. W. J. Coursin, H. L. Tuckert, J. W. Humphrey, R. A. Todd and Fred. Johnson are the incorporators. The line is projected to start at the dividing line between Wayne Township and Ellwood City on West Lawrence Ave., and will continue along Lawrence Ave. to Station St., North Sewickley Township, returning by the same route. It is stated that work will be started on building the line as soon as a charter can be obtained.

FREDERICK, MD.—A franchise has been asked for by the Frederick Railroad Co., to lay tracks on Market St. from Fifth St. to South St., and from Telegraph St. to Carroll St. over South St. It is stated that the Frederick & Middletown Trolley Line and the Washington, Frederickburg & Gettysburg Railway, a steam road, are to be connected, and that it is planned to electrify the latter. O. B. Coblentz is Ch. Engr., of the Frederick R. R. Co., at Frederick, Md.

MORGANTOWN, W. VA.—The Morgantown City Council has granted three traction ordinances, one to the Union Utilities Co., a second to the Morgantown & Dunkard Valley Traction Co. and the third to the South Morgantown Co. All franchises carry with them the right to construct additional track over certain streets on which they already have lines.

ATLANTA, GA.—The Middle Georgia Interurban Ry. Co. has been authorized by the Railroad Commission to issue $100,000 of stock and $50,000 of bonds for its proposed 70-mile electric railway from Griffin to Social Circle via Jackson, Indian Springs and Monticello.

STEUBENVILLE, OHIO.—The Dennison & Urichsville traction line has been sold to Brooks & Co., of Scranton, Pa., for $125,000. It is stated that the road will be improved and extended to a number of nearby towns.

GREENVILLE, OHIO.—This city has voted a 50-year franchise to S. A. Price and associates, of Dayton, for an electric railway system to cost about $200,000. Five miles of track are to be in operation in 18 months.

EAST ST. LOUIS, ILL.—The Valley Park, St. Louis & Eastern Ry. Co., Springfield has incorporated in Illinois to build a railway starting on the Mississippi River, opposite St. Louis, and extending to a point on the Indiana line in Iroquois County. Capital stock, $100,000. The incorporators are William C. Plass and Armond R. Plass, St. Louis; Charles Neustadt and John Suess, East St. Louis, and Henry Schrader, Belleville.

GALESBURG, ILL.—The City Council has granted the Peoria & Galesburg R. R. Co. an extension of nine months in which to build its electric road over the right-of-way formerly given to the company in this city, the extension given last night dating nine months from July 21. The road is to be built between Peoria and Galesburg and will come into Galesburg over Knox St. to Locust St. to South St., to Cherry St., to Ferris St. and then south to South St.

HOUSTON, TEX.—The holdings of the Penn City Land Co. have been sold to the American Mortgage Co., 244 Oliver Bldg., Pittsburg, Pa., which proposes to build an interurban railway from Green's Bayou to Houston, and a railroad to connect with the Houston Belt & Terminal Co.'s Line, and commence other improvements soon. J. S. Welch is Secy. and Treas. of the Penn City Land Co., 703 Scanlan Bldg., Houston.

GREENVILLE, TEX.—S. A. Price, H. J. Meyers, Dayton, Ohio, and associates, have been granted a franchise to build a 5-mile electric railway in Greenville. Noted on July 28.

TECUMSEH, OKLA.—The Rapid Transit Interurban Co. has secured from the city of Tecumseh a franchise, and from the County Commissioner of Pottawatomie County, permission to cross all public roads and highways; therefore the preliminary work of constructing the line from Tecumseh to Sulphur will be commenced at once and will be speedily pushed on the part where franchise and permission has been secured. The Rapid Transit Interurban Co. has been incorporated under the laws of the Territory of Oklahoma, with a capital stock of $2,500,000 to build an electric interurban railroad from Muskogee to Chickasha, and from Guthrie to Sulphur, crossing at Tecumseh.

NORTH YAKIMA, WASH.—The officials of the North Coast Co. now building across Washington, are preparing to operate a standard gage railroad across the Cascade Mountain range by electricity. In the Yakima valley and along the Columbia River Robert Strahorn, Pres. of the North Coast Co., and his associates are developing several great hydro-electric plants. An electric power project is being developed at Packwood Lake, near the headwaters of the Cowlitz River, approximately 90 miles southeast of Tacoma. That region is now a wilderness, with the nearest branch of the Tacoma & Eastern R. R. about 20 miles distant. The power plant, when complete, will cost $3,000,000, with transmission lines to Tacoma, Seattle, North Yakima and other towns in Central Washington. The project is said to be connected with the North Coast railway, with the object of supplying the power by which that railroad will operate its trains across the Cascades. F. L. Pitman is Ch. Engr., Spokane, Wash.

SEATTLE, WASH.—The Council's Committee on Corporations recommend the passage of an ordinance granting to the Seattle Electric Co., a franchise calling for the use of parts of North and East 40th Sts, Wallingford Ave., and Sixth Ave., N. W. E. E. Potter, Seattle, is Mgr.

CHEHALIS, WASH.—C. Lewis Wilson and W. H. Allen, Chehalis, have secured right-of-way necessary to build an electric railway from Chehalis to Randle via Forest Ethel, Salkum, Silver Creek, Mossyrock and Riffe. Eastern capitalists will furnish $3,000,000 to build this line.

EUGENE, ORE.—The Oregon Electric Ry. Co., Portland, has been granted a franchise by the City Council to build an extension of its line through Eugene. R. T. Linney is Gen. Mgr., Portland, Ore.

STOCKTON, CAL.—The Board of Supervisors of San Joaquin County have granted the Central California Traction Co. a franchise through the Fair Oaks to the Santa Fe. Samuel B. McLenegan, Stockton, is Gen. Mgr.

LIGHT AND POWER PLANTS.

*(*Denotes that this work is advertised in Engineering News.)*

LENOX, MASS.—The ROGERS ELECTRIC CO. has been awarded contract for installing electric lamps in and about the grounds and driveway of the Highland House for W. B. O. Field; also for wiring the gate house for electric light service. About 100,000 ft. of cable will be used in the work.

WESTFIELD, MASS.—The city is considering plans for extensions and improvements to the municipal electric and gas plants, including the erection of a new building and the installation of new machinery. Improvements will be made to the gas plant which will increase the output from 125,000 to 225,000 cu. ft. per day. Estimated cost, $15,000. Bids will be asked soon.

NEW BEDFORD, MASS.—The State Board of Gas and Electric Light Commissioners has approved the application of the New Bedford Gas & Edison Light Co. for an increase in capital stock of $215,000, for additions to the plant and to take up floating indebtedness.

BOSTON, MASS.—Bids will be received until Sept. 12, by the Superintendent of Streets for furnishing gas and for furnishing and maintaining and lighting 10,000 gas incandescent mantle burners.

CHEEKTOWAGA, N. Y.—The citizens are considering the question of installing electric lamps on Broadway, through the town from the city line to the Village of Depew. A. A. Durringer is interested.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., until 3 p. m., Sept. 12, for Item 1, installing heating and ventilating apparatus; Item 2, installing temperature regulation; and Item 3, installing electric ash-hoist in addition to and alterations in Erasmus Hall High School, Boro. Brooklyn.

NEWARK, N. J.—The Board of Chosen Freeholders on Aug. 11, awarded contract for the electric light and power plant at the courthouse here to the WATSON-FLAGG ENGINEERING CO., at $26,495.

PATERSON, N. J.—The Board of Managers of the General Hospital on Aug. 12 awarded contract to the ANDERSON BUILDING CO. for the construction of a power plant for the General Hospital, nurses' home, and other buildings. The building in which the plant will be installed will be practically two stories in height, one story of which will be sunk in the ground to accommodate two large boilers and the other story will be used as an electrical power plant for the generating of electricity for lighting and power for all the hospital buildings. Estimated cost, $25,000.

McKEESPORT, PA.—The Pittsburg, McKeesport & Westmoreland Ry. Co. is preparing for the construction of a power house, 40 ft. × 40 ft., to be erected on a site adjoining its car house in Westmoreland County. The company now purchases electricity for operating its system from the West Penn Railways Co.

FREDERICK, MD.—The directors of the Frederick R. R. Co., on Aug. 22, decided to electrify the Thurmont division, running from this city to Thurmont, and formerly called the Washington, Frederick & Gettysburg road, at a cost of about $75,000. The company will also build and equip a new power house sufficient to operate both roads at a cost of about $200,000.

ANNAPOLIS, MD.—Bids will be received by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Sept. 10, for additions to power plant and distributing systems, Naval Hospital, Annapolis. Specifications are on file at the office of Engineering News, New York.

BALTIMORE, MD.—Fred. Decker & Son, 1209 East Biddle St., are the lowest bidders on the proposed power house at Bay View, for the city, from plans by Parker, Thomas & Rice, Archs., at $24,000. The building will be two stories, brick and concrete fireproof, slate roof.

ORANGEVILLE, MD.—Bids will be received until 10 a. m., Sept. 1, at the office of W. H. Cookman, Philadelphia, Pa., for the proposed power plant and shops to be erected at Orangeville, near Baltimore, for the Pennsylvania R. R. Co., two stories, brick, stone, slag roof, sheet metal work, plumbing, concrete floors.

DALTON, GA.—See item under Water Supply—Irrigation.

WASHINGTON, D. C.—Bids were received as follows on Aug. 19 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for furnishing and installing lighting fixtures in the United States buildings at Gonzales, Tex.; Greenwood, S. C.; Michigan City, Ind.; Paris, Ky.; Pittsfield, Mass.; Augusta, Me.; and Eureka, Cal.; D. J. Braun Mfg. Co., Chicago, Ill., $10,086; Edward Miller & Co., Meriden, Conn., $3,585 (partial bid); Charles Polacheck & Bro. Co., Milwaukee, Wis., $2,291 (partial bid); Thomas Day & Co., San Francisco, Cal., $3,096.40 (partial bid).

***WHEELING, W. VA.**—Bids will be received by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., until 11 a. m., Sept. 27, for building a fireproof power house and chimney, and installing two 115-HP. boilers, two steam driven air compressors, receivers, piping, etc., at Dam No. 26, Ohio River. Bids will be considered on the entire plant, or for house and chimney, and for different lots of machinery, etc., separate.

CHARLOTTE, N. C.—Contract has been awarded to the Globe Electric Co., of Charlotte, by JOHN E. SCHOTT, representative of the John W. Fries Co., of New York, for equipping the company's humidifying systems for electrical operation. The Globe Electric Company has also secured contracts to equip the plant of the Peck Mfg. Co., of Warrenton, for electric motor drive and the Clyde Cotton Mills, of Newton, to be operated by electricity.

MONTICELLO, GA.—The Jasper Cotton Mills, lately organized, is preparing for the construction of a mill with a capacity of 10,000 spindles to be equipped for electric motor drive. The company, it is reported, is ready to place contracts for machinery. For further information address L. O. Benton.

ATLANTA, GA.—The Finance and Electric Light Committees of the Council have voted to recommend to the Council the acceptance of the plan for a "Great White Way," on Mitchell St., from the terminal station to Whitehall St. on Whitehall from Mitchell St. to the viaduct and on Peachtree St., from the viaduct to Ellis St., submitted by George A. Miller representing the Flour City Ornamental Iron Works, of Minneapolis, Minn. The plan calls for the erection of 125 Corinthian standards, 70 ft. apart along entire route, each standard carrying five lamps. Property owners along the route have agreed to pay for the cost of the installation providing the city would maintain them. It is expected that the Council will adopt the recommendation and work will commence on the installation of the system at once. Estimated cost of maintaining the system, lamps burning from dusk to midnight, $45 per year for each standard.

CANTON, GA.—The Railroad Commission, on Aug. 18, authorized the Blue Ridge Power Co. to issue $500,000 of stock and $300,000 of bonds for the purpose of improving water power on the Etowah River near Canton, Cherokee County.

LAKELAND, FLA.—The city is completing arrangements for the improvement of the electric light plant.

ST. AUGUSTINE, FLA.—Improvements are contemplated by the St. Johns Light & Power Co., to its electric light, power and street railway system, including the installation of additional machinery at the power plant, installing an electric motor at the drawbridge and rebuilding its tracks with heavier rails.

OSYKA, MISS.—The city has voted $20,000 of bonds for the construction of an electric light plant and water-works.

THIBODAUX, LA.—Bids are asked by the city until Sept. 23 for the construction and installation of an electric-light plant building, to be 42 x 56 ft. mill construction. Estimated cost, $40,000; machinery $35,000. R. J. Maquin is Clk.

PARKESVILLE, TENN.—J. G. White & Co., 43 Exchange Pl., New York, have been engaged as engineers in charge of the complete engineering work and construction of a hydro-electric power plant for the Eastern Tennessee Power Co. The dam and power station will be located on the Oconee River, at Parkesville. The work will include: A dam of cyclopean concrete, 780 ft. long on crest, 430 lin. ft. of overflow type and 350 lin. ft. of non-overflow type, overflow portion 110 ft. about mean water, having crest at elevation of 825 ft., of usual ogee section; non-overflow portion about 13 ft. higher than overflow section, and of special section to accommodate penstock intakes at top and penstock passing from intakes to turbine below; power-house on down stream side of non-overflow portion to be integral part of same; substructure of massive concrete, to consist mainly of piers and arches below dam; turbines to be located at elevation of main floor, and to discharge into tailrace under arches; superstructure of brick or stone walls, with enclosed steel columns, latter to support superstructure floors, crane runway and steel roof trusses; superstructure floors of reinforced-concrete slabs supported on steel girders and floor beams; roof slabs of reinforced concrete supported on steel purlins, and provided with suitable roof covering; power equipment to consist of four main units of normal rated capacity of 3,000 KW. each; one 200-KW. exciter unit; necessary step-up transformers and switching equipment for control, each main unit to consist of tandem horizontal turbine in enclosed case direct connected to 3-phase 60 cycle water-wheel type alternating-current generator, each generator to have mounted on its shaft an exciter having a capacity sufficient for its excitation; miscellaneous equipment to consist of electrically-driven traveling crane, transformer truck, gates and gate hoists, water and oil and air-circulating systems, etc. The first development near Parkesville will be for 22,000 HP. and have space for 10,000 HP. additional, a total of 32,000 HP., to be ready for transmission by Jan. 1, 1912. The second development will be located near Ducktown, to transmit 53,000 HP. constructed after completion of the first plant. Estimated cost, $2,000,000.

YOUNGSTOWN, OHIO.—Bids will be received by the Clerk of the Board of Education until Sept. 19, for installing electric wiring in the South High School. W. N. Ashbaugh is Dir. Schools.

WEST CARROLLTON, OHIO.—See item under Water Supply—Irrigation.

MIDDLETOWN, OHIO.—The SAFETY INSULATED WIRE & CABLE CO., 114 Liberty St., New York, has been awarded contract by the Middletown Gas & Electric Light Co. for laying underground electrical conduits and installing cables in Middletown. Estimated cost, $12,000.

ATHENS, OHIO.—Bids will be received by the Board of Trustees of the Ohio University, at Athens, until noon, Sept. 7, for furnishing the materials and performing the labor necessary for an addition to the power house, the mechanical equipment, the heating of Ellis Hall, and for the Science Hall Building, in accordance with the plans and specifications, bills and estimates prepared by Frank L. Packard, Arch., Columbus, Ohio, which plans and specifications are on fice at the office of I. M. Foster, Secy., Athens, Ohio., and at the office of the architect, New Haven Bldg., Columbus, Ohio.

MARIETTA, OHIO.—The County Commissioners have approved plans for the installation of a water or steam heating system at the Washington County Children's home here.

CAMBRIDGE CITY, IND.—See item under Water Supply—Irrigation.

CRAWFORDSVILLE, IND.—Contract has been awarded to the NATIONAL REGULATOR CO., Chicago, for the installation of a system of heat regulation in the new high school building. The company has also contract to install a new heating plant in the Mills Bldg., in this city.

FORT WAYNE, IND.—The Indiana Lighting Co. has ordered plans on which bids will be asked for the construction of a cold-storage plant and boiler room on East Superior St.

DETROIT, MICH.—Baxter & O'Dell, Archs., 1024 Hammond Bldg., Detroit, will take figures soon on a new 5-story power building, 67 × 138 ft. for the J. E. Scripps Corporation, William E. Scripps, Secy., 65 Shelby St., Detroit. The building will be of enamel and stock brick, Bedford stone, composition roof, galvanized iron skylight and cornice, structural iron, hardwood finish and floors and electric fixtures. Estimated cost, $60,000.

MUSKEGON, MICH.—We are officially advised that the city is considering the construction of a municipal electric light plant. Bids will be asked in about 60 days. Estimated cost, $75,000. B. G. Tellman is City Clk.

Grossman & Boeskauser, 84 Van Buren St. Chicago, Ill., are preparing plans for a new hydro-electric plant here.

DECATUR, ILL.—See item under Manufacturing Plants.

DES MOINES, IOWA.—Bids are being received by the Coliseum Co. for the installation of an electric light plant in the Coliseum to supply electricity for lighting the building and for a large electric sign.

NATIONAL MILITARY HOME, KAN.—Bids will be received by W. W. Martin, Treas. Western Branch, National Home Disabled Volunteer Soldiers, National Military Home, until Sept. 3 for furnishing and installing an electric elevator at the quartermaster's storehouse. Plans and specifications can be seen at the office of the quartermaster. Specifications with blank proposals and other information can be secured upon application to the treasurer.

OMAHA, NEB.—Bids will be asked soon by the County Commissioners for electrical work on the new court house, including the installation of two electric elevators. Estimated cost, exclusive of elevators, $20,000.

BOWMAN, N. DAK.—The installation of an electric light plant here is under consideration. C. M. Cleveland, of Wausau, Wis., is reported to be interested and will apply for a franchise.

FORT TOTTEN, N. DAK.—Bids were received as follows by the Commissioners of Indian Affairs, Washington, D. C., on Aug. 23, for the heating and lighting system at the Fort Totten School: W. D. [illegible]ell, Indianapolis, Ind., $5,300; six months. Mac-Hann & Kremer-Moon Heating Co., St. Louis, Mo., heating, $3,163; lighting, $2,541; 90 days. James Stevenson, Devil's Lake, N. Dak., heating, $2,172; [illegible] days.

LA GRANGE, MO.—The city will construct an incandescent street-lighting system.

KANSAS CITY, MO.—The big Niangua Hydro-Electrical Co., owning land on both sides of the Niangua River, is contemplating the development of 30,000 HP., for transmission by electricity. The present capitalization is $150,000, and it is proposed to increase to $5,000,000, to include bonds for [illegible]500,000. Estimated cost of dam, water power, machinery, electrical equipment, etc., [illegible]500,000. Address R. E. Brunner, 914 Comm[illegible] Bldg., Kansas City.

LOS VEGAS, N. MEX.—Vernon Sullivan, Territorial Engr., Phoenox, has approved the application of J. J. [illegible]ubach, William Harper, W. J. Benjamin and W. B. Bunker, all of Las Vegas, for the construction of a large power plant on the Rio de la Casa. A water fall on the river, which is a tributary of the Mora River, on the Pecos reserve in Mora County will be harnessed. The plant will cost $100,000 and will produce 2,745 HP. The flow is [illegible]08 second feet. According to the plans a diversion dam 15 ft. in height and 35 ft. wide at the top and 50 ft. wide at the bottom will be built.

LORDSBURG, NEW MEX.—J. Barclay, of Moline, Ill., and associates who own the Eighty-five Mine, situated four miles from here, are arranging to install a large central electric power plant to provide their own mine with power and to furnish power to other mines and industries in this section.

SEATTLE, WASH.—See item under Streets and Roads.

REDMOND, ORE.—The Odin Falls Power Co., which recently applied to the City Council for a franchise to supply electricity and water in Redmond, is considering the construction of a power plant at Odin Falls and transmit electricity and pipe the water to this town.

PASADENA, CAL.—The Ciy Council is contemplating extending the municipal electric light system to parts of the city not having electrical service and the City Clerk has been authorized by the Lighting Committee to ask for bids for an auxiliary boiler for the municipal electric light plant. C. W. Koiner is Gen. Mgr.

POMONA, CAL.—J. M. Paige, Supt. of Parks, has been instructed by the trustees to make investigations in regard to the cost of installing a lighting system in Ganesha Park.

LOS ANGELES, CAL.—The Los Angeles Gas & Electric Corporation has awarded contract to the BAKER IRON WORKS, 932 North Broadway, for the erection of a 30-in. pipe, from 14 × 48 ft. scrubber to No. 2 relief holder and by-pass, etc., at the company's plant at Aliso and Centre Sts., at $3,765.

LONGBEACH, CAL.—CHARLES W. COBALEY, Wilcox Building, Los Angeles, has been awarded contract for driving piles for foundation, power-house, etc., at Longbeach, for the Southern California Edison Co., at $15.60 per pile for 50-ft. piles, $12.80 for 40-ft. About 250 piles will be required for transformer station, besides additional piles for foundations for power-house, etc.

SAN DIEGO, CAL.—The San Diego Electric Ry. Co., William Clayton, Gen. Mgr., John D. Spreckels, San Francisco, owner, are formulating plans for a new power house. Estimated cost, $225,000. The capacity of the plant will be 35,000 KW. The first unit of the plant, for which plans are being prepared by Andrew Ervast, Engr., will be a reinforced concrete structure, 160 × 75 ft., to be used solely as an engine room, and in addition to the present equipment of the plant there will be provided two new engines of the vertical type. The second building to be erected will be a boiler room, to contain eight sets of 6-oil burning boilers each, provided with three concrete smokestacks, 125 ft. high. Each building will be 60 ft. high and provided with electric traveling cranes, with capacity of ten tons, and the other 65 tons. The Electric Security Construction Co., of Los Angeles, will probably be awarded contract for the structural steel, which will amount to 750 tons. There will be 7,000 cu. yds. of concrete and 8,000 sq. ft. of glass used in the construction. The excavations will amount to 11,000 cu. ft.

ESCONDIDO, CAL.—C. C. Glass, Mgr., Escondido Utilities Co., is planning the extension of electric light and power service into the San Pasqual, Twin Oaks, and San Marcos Valleys. The transmission and distributing system will cost $10,000.

PHOENIX, ARIZ.—Bids will be received by Charles W. Goodman, Supt. Indian School, Phoenix, for furnishing and delivering at the school, 1,150 electric lamps, cord, wire, taps, etc., during the fiscal year ending June 30, 1911.

SALT LAKE CITY, UTAH.—The Utah Light & Ry. Co., will extend its distributing system in Davis County, to develop an electric lighting and power market in the territory between Salt Lake City and Ogden. The company's plans include the erection of a steel tower transmission line between the two cities, which is required to transmit the increased amount of power which the company receives from the north, as a result of the installation of its new plant at Devil's Gate and the enlargement and improvement of its plant at Ogden.

MACKAY, IDAHO.—The Mackay Light & Power Co. on Aug. 10, awarded contract to INTERMOUNTAIN ELECTRIC CO., and the UTAH ENGINEERING & MACHINERY CO., for the installation and completion of a complete electric lighting and power plant. The Mackay Light & Power Co., was formed here and incorporated for the purpose of generating light and power. The company has rights on Cedar Creek, which lies about five miles above Mackay. They also have a franchise on the streets and alleys of the village for electric light and power purposes. The plant to be installed is of the hydro-electric type consisting of about one mile of pipe line, one Morgan-Smith, Francis type water wheel, connected to a Westinghouse alternating current water type of generator, complete with electric switchboard and station equipment; also 4½ miles of transmission line capable of carrying 2,300 volts, which is to be distributed in Mackay with two 220 volts power circuit and a 110-volt lighting circuit.

ALMONTE, ONT.—The Mississippi River Improvement Co., is having plans and specifications prepared for the construction of two concrete dams at the foot of Long and Gull Lakes, respectively. Bids will be asked as soon as plans are approved by the Hydro-Electric Commission. It is expected the work will be completed before winter.

NIAGARA FALLS, ONT.—We are officially advised that the contract for power, heating and lighting for the factory here for Hawes, Von Gal, Inc., Edward J. Von Gal, Pres., has been awarded to the WESTINGHOUSE MFG. CO.

WINNIPEG, MAN.—Bids will be received until Sept. 4, by the Commissioners of the Transcontinental Ry., Ottawa, Ont., for the wiring system required in connection with the locomotive shops of the railway. P. E. Ryan is Secy. Comrs.

Bids will be received until Sept. 14, by the Commissioners Transcontinental Ry., Ottawa, Ont., for air, steam, water and oil piping system, also pipe tunnel and wiring ducts, required in connection with the east of Winnipeg. P. E. Ryan is Secy. Comrs.

MEXICO CITY, MEX.—P. W. DARLINGTON, Philadelphia, Pa., has been awarded contract for the construction of a new electric fountain to cost $60,000 in the grounds surrounding the Castle of Chapultepec. Electrical equipment will consist of eleven lights of a combined candlepower of 88,000 and 1,800 jets. In the construction of the fountain 30 tons of steel piping will be used. The basin is of concrete, and the fountain stands twelve feet above the surface of the water. The piping rises to a height of 30 ft. above the surface.

BRIDGES.

*(*Denotes that this work is advertised in Engineering News.)*

*VAN BUREN, ME.—R. E. Greenwood, Engr.-in-Charge of the construction of the International Bridge over the St. Johns River, advises us regarding the duties imposed as follows: A letter signed by George Kaehler, Act. Ch., Division of Customs, Washington, D. C., states that "materials intended for use in the construction or repair of international bridges on the boundary line between the United States and Canada, as well as the tools and implements employed therein, are not considered to be imported merchandise within the meaning of the tariff laws and are not, therefore, subject to duty, except such materials as may be used in the approach to such bridges wholly upon the American shore end thereof. Tools, implements and materials intended for use in such bridges, which are landed on the American shore, however, are required to be kept under the supervision of a customs officer, at the expense of the parties in interest, until such time as they may be actually used or returned to Canada."

A letter signed by R. F. Farrow, Asst. Comr. of Customs, Ottawa, Ont., follows: "Item No. 596 of the Customs Tariff of Canada, 1907, contains the following provisions for free entry, viz.: (596) Materials to be used in Canada for the construction of bridges and tunnels crossing the boundary between the United States and Canada, when similar materials are admitted free under similar circumstances into the United States under regulations prescribed by the Minister of Customs." Bids for this work are asked until noon Sept. 9. Noted on Aug. 11.

WALPOLE, N. H.—Contract for replacing the old wooden bridge across the Connecticut River between Walpole and Westminster, Vt., has been awarded to the WALSH HOLYOKE STEAM BOILER WORKS, Holyoke, Mass. The structure will be a steel plate girder type. Estimated cost, $20,000.

BOSTON, MASS.—Bids were received by Superintendent of Streets on Aug. 24 for repairing the Albany St. bridge, as follows: New England Structural Steel Co., $9,479; Boston Bridge Co., $10,296.

SAYBROOK, CONN.—Bids were received on Aug. 15 by the Saybrook and Lyme Connecticut River Bridge Commission, Saybrook, James H. Day, Secy. and Treas., for constructing the superstructure of a highway bridge over the Connecticut River between the towns of Old Saybrook and Old Lyme. The bridge is to be of 8-deck riveted spans of about 159 ft., 2-deck riveted spans of 122½ ft., 1-deck Scherzer rolling lift draw in two wings, total length, 282 ft. Contract has been awarded to PENSYLVANIA STEEL CO., of Steelton, Pa., at $196,045. Boller & Hodge are Consulting Engrs., 149 Broadway, New York.

PHILADELPHIA, PA.—Plans for widening of Chestnut St. bridge over the Schuylkill River are nearing completion. For this purpose $90,000 is provided in the new loan, and it is expected that work will be begun as soon as possible. At present, the roadway between curbs is 26 ft., with a 6-ft. walk on each side. The new plans call for a 36-ft. roadway, with sidewalks 8½ ft. on each side. These sidewalks are to be suspended on steel brackets sunk in a concrete base. The east approach to the bridge is to be widened from 50 to 60 ft. George R. Stearns is Dir. Pub. Wks. George S. Webster is Ch. Bureau of Surveys.

READING, PA.—The County Commissioners have decided to construct a new concrete bridge across the Schuylkill River at Penn St. Estimated cost, $100,000 to $150,000.

TYRONE, PA.—Bids were opened by the County Commissioners on Aug. 9 for constructing the bridge across Bald Eagle Creek at Tyrone as follows: Ferro Concrete Co., Harrisburg, $11,475; Nelson-Merydith Co., Pittsburg, $11,647; W. H. HERR, Altoona, $8,300 (awarded contract); Fogel & Co., Hollidaysburg, $9,196; I. G. Robison, Hollidaysburg, $9,765; Myers, Gable & Ritchey, Duncansville, $7,670.

BUTLER, PA.—The PENN BRIDGE CO., of Beaver Falls, Pa., has been awarded contract for the superstructure of a plate girder bridge to replace the West Main St. bridge at $5,492. I. T. HEAVENS, of Mount Chestnut, has contract for the concrete superstructure at $6.17 per cu. yd. Bids were opened on Aug. 19.

WASHINGTON, PA.—Bids will be received until noon, Sept. 6, by John M. Moffitt, County Controller, for removing and erecting the following bridges: Crumrine bridge over Plum Run, in Deemston Borough, steel truss of 45-ft. span to be moved 200 ft. up-stream, re-erected on new abutments; Van Eman bridge over Chartiers Creek, Cecil and North Strabane Townships, a steel truss bridge, 100 ft. span, to be moved 600 ft. up stream and re-erected on new abutments; Shidler bridge over Ten Mile Creek, West Bethlehem Township, a steel truss, 140-ft. span, to be moved one mile upstream and re-erected on new abutments. Bids may be made on substructure and superstructure, separately or combined for both stone and concrete masonry. Chaney & Armstrong are Engrs., Court House, Washington.

ALLENTOWN, PA.—The Board of County Commissioners of Lehigh County will receive bids until 10 a. m., Sept. 12, for the construction of a reinforced-concrete bridge over Coplay Creek, North Whitehall Township. The work includes the demolition of the present bridge, the reconstruction and repair of the present masonry and the erection of a reinforced-concrete girder bridge; for painting and scraping the iron work on the Gordon St. bridge, Allentown, the reconstruction of the roadway and sidewalks, the reinforcement of the present structure and other incidental work, and the demolition of the present bridge over Ontelaunee Creek, Lynn Township, and the construction of a two-span concrete encased steel girder bridge; the furnishing labor and material for the construction of a vitrified brick roadway, leveling sidewalks and other incidental work on the Linden St. bridge, Allentown.

BALTIMORE, MD.—The Pennsylvania R. R. Co., Alex. C. Shand, Ch. Engr., Philadelphia, Pa., will construct an ornamental reinforced-concrete bridge to connect Charles and St. Paul Sts. in connection with the Union station. Kenneth M. Murchison, 320 Fifth Ave., New York, is preparing plans and will ask for bids. The company also contemplates the construction of a viaduct on Lafayette Ave., between Pulaski and Smallwood Sts.

PORTSMOUTH, VA.—The city will replace the wooden bridge at the south end of Washington St. and over Scott's Creek, in Glasgow St., and the bridge at Swimming Point Creek at the north end of Washington St., and Gander Creek at south end of Dinwiddie St. All new bridges will be of the same construction, and consist of corrugated iron pipe imbedded in concrete, and will probably require two or three lateral sections of pipe under all structures to carry flow of water. Appropriation of $3,500 is available. The work will be under the supervision of V. O. Cassell, Jr., City Engr.

PEARISBURG, VA.—Bids will be received at the office of the Clerk of Giles County, Pearisburg, until noon, Sept. 6, for the construction of two steel and masonry bridges, one over the New River at Eggleston and one over the New River at Narrows. Alternate bids on cylinder piers will be received. Plans and specifications can be seen at the office of P. St. J. Wilson, State Highway Comr., Richmond, Va., and at the office of the Clerk, Pearisburg.

WILMINGTON, N. C.—The following bids were opened on Aug. 16 by the Street Commission for the construction of the steel bridge over the tracks of the Atlantic Coast Line Ry. at Sixth St.: F. H. Schmidt, 30 Church St., New York, $9,075; Southern Construction Co., Burlington, N. C., two plans, $7,500 and $6,500; Southern Bridge Co., Spartanburg, S. C., cost of steel 4½ cts. per lb. and weight to be submitted later; Grant Wilkins, Atlanta, $10,204; Pennsylvania Steel Co., of Steeltown, Pa., $9,990; Roanoke Bridge Co., Roanoke, Va., $8,290; Owego Bridge Co., Greensboro, $7,700; Cates Machine & Bridge Co., Burlington, N. C., $8,250; York Bridge Co., Charlotte, $8,150.

BIRMINGHAM, ALA.—The Board of Alderman has adopted a resolution authorizing the constructing of a viaduct at First Ave., between 26th and 34th Sts.

MARKSVILLE, MISS.—Bids will be received until Sept. 5 by the Board of County Commissioners, Lexington, for constructing an iron drawbridge across Tchula Lake at Marksville, District 5. Parham Williams is Chancery Clk.

BENTON, TENN.—The Polk County Commissioners are considering the appropriation of $16,000 for the construction of bridge over Ocoee River at Coxies Ford.

PARIS, KY.—The Louisville & Nashville R. R. Co., W. H. Courtenay, Ch. Engr., Louisville, Ky., it is reported, will replace the Main St. bridge over Houston Creek with a 700-ft. bridge of viaduct type. Estimated cost, $60,000.

ALMO, KY.—The VINCENNES BRIDGE CO., of Vincennes, Ind., has secured the contract for constructing an iron bridge across Clark River, near here, at $3,475.

IRONTON KY.—The Cincinnati Hamilton & Dayton Ry. Co. will build a bridge across the Ohio River near here. William Cotter is Pres.

YOUNGSTOWN, OHIO.—The Republic Iron & Steel Co. has awarded contract, it is stated, to the AMERICAN BRIDGE CO., 30 Church St., New York, for constructing a viaduct from Center St. to Poland Ave., requiring about 1,000 tons of steel. Estimated total cost, $100,000.

CLEVELAND, OHIO.—Plans are being considered by the County Commissioners and the Council of the Village of Bratenahl for renewing the bridge over Nine-Mile Creek.

Bids received on Aug. 15 by the city for the construction of the substructure of the Adelbert Road grade crossing bridge over the New York, Chicago & St. Louis Ry. have been rejected. The lowest bidder was W. P. Gibbons at $7,300.

BARBERTON, OHIO.—Bids were received as follows on Aug. 8 by the Village Council for the construction of the Cornell St. viaduct. Wilson & English Construction Co., 13 Park Row, New York, $45,658; Ed. J. Landor, of Canton, Ohio, $44,027; Jones Bros., of Columbus, Ohio, $45,953; Lisher & Wagner, of Jersey City, N. J., $45,438; Paul & Henry, of Barberton, $45,523; George J. Bock & Sons, of Coshocton, abutments and wing walls only, $21,861; Capital Construction Co., of Columbus, superstructure only, $7,343; King Bridge Co., of Cleveland, superstructure only, $7,505.

SPRINGFIELD, OHIO.—The Ohio Electric Ry. Co. will construct a new bridge over Wonnels Creek, work to be completed by Dec. 1.

CINCINNATI, OHIO.—Bids will be received by Board of County Commissioners until noon, Sept. 16, for the following county work: Under Specifications No. 103, for concrete bridge over Toad Creek, near the Colerain Pike, on the River Road, in Colerain Township. Plans and specifications are on file at the office of the Board. Fred Dreihs is Clk.

RUSHVILLE, IND.—Bids were opened on Aug. 20 by the Board of County Commissioners for constructing a 55-ft. concrete arch bridge in Washington Township. Contract has been awarded to the PAN-AMERICAN BRIDGE CO., of New Castle.

FORT WAYNE, IND.—Bids are asked by George W. Lindemuth, County Audr., Fort Wayne, until 10 a. m., Sept. 3, for the construction of concrete culverts, concrete abutments and steel bridges; also for furnishing material for repair of bridges and putting on concrete floors. Where I-beams and plates are specified they are to be delivered at jail yard, with necessary shop work complete; when plank is specified same to be delivered at bridge site. Two long span concrete steel arch bridges are included in the above work, and to consist of two 85-ft. spans over the St. Mary's River on the line dividing Allen and Adams Counties; appropriation, $12,000; the second and larger bridge to consist of two 110-ft. spans over the Maumee River in the city of Fort Wayne; appropriation, about $30,000. Plans are on file at the office of the County Auditor.

MENDOTA, ILL.—Bids have been rejected by the city for the construction of three bridges, one at Jefferson St., one at Fifth Ave. and the other at Ninth Ave. The bids were: Herman Bierwirth, $3,334; Charles Walter, $4,006; H. Zolper & Sons, $4,042. The work will be readvertised.

TAYLORVILLE, ILL.—The city has rejected all bids for the construction of eight steel bridges across the big union drainage ditch in King Township.

CHICAGO, ILL.—Bids will be received until Sept. 2 by B. J. Mullaney, Comr. Pub. Wks., for furnishing material and constructing two center locks for the State St. bridge, lengthening and reconstructing span and also for repairing and reconstructing abutments, etc., of the 106th St. bridge.

OTTAWA, ILL.—The DECATUR BRIDGE CO., of Decatur, Ill., has been awarded contract for the construction of a steel bridge over Covel Creek, with concrete abutments, at $3,257.

COUNCIL BLUFFS, IOWA.—The Union Pacific Ry. Co. is considering the construction of a 4-track bridge to replace its present structure across the Missouri River, between Council Bluffs and Omaha. Estimated cost, $5,000,000. R. L. Huntley is Ch. Engr., Omaha, Neb.

MINNEAPOLIS, MINN.—The Great Northern Ry. Co. has submitted to Andrew Rinker, City Engr., plans for the reconstruction of bridges forming the railroad viaducts on University Ave. and on the corner of 15th Ave. and Fourth St.

RANDOLPH, MINN.—Contract for the construction of the bridge across the Cannon River here has been awarded to the HENNEPIN BRIDGE CO., of Minneapolis, Minn., at $7,700. L. P. Wolf is Engr., 204 Essex Bldg., St. Paul, Minn.

SAVAGE, MINN.—Max Toltz, 701 Capital Bank Bldg., St. Paul, Minn., is receiving bids for the construction of a steel trestle for the Dan Patch Air Line electric road. A 35-ft. steel span will be used as well as piling and trestle work. Estimated cost, $20,000.

TOPEKA, KAN.—Plans have been filed by the Atchison, Topeka & Santa Fe. Ry. Co. for the construction of the Cleveland Ave. viaduct here.

CHEYENNE, WYO.—The PUEBLO BRIDGE CO., of Pueblo, Colo., has been awarded contract for constructing a bridge at Lingle at $19,000.

LOUISIANA, MO.—The County Court has awarded contract for the construction of a bridge across Peno Creek to the MISSOURI BRIDGE CO. at $3,725.

CARTHAGE, MO.—William Kohlman, County Highway Engr., will receive bids until 1.30 p. m., Sept. 7, for furnishing the labor and material and erecting several bridges. Plans and specifications are on file at the office of the County Clerk.

WACO, TEX.—The date of opening bids for the construction of a 54-ft. span steel girder bridge and abutments, 22-ft. span steel I-beam bridge and abutments, 20-ft. span reinforced-concrete culvert, 7-ft. span reinforced-concrete culvert, has been extended to Sept. 6. Bids were to have been opened on Aug. 23. P. A. Gorman is Comr.

SAN ANTONIO, TEX.—The city has awarded contract to the LEVERSEDGE BRIDGE CO., of Fort Worth, Tex., for constructing a bridge across San Antonio River at Travis St., at $15,000. The structure will be one span, 80 ft. long; reinforced concrete upon piling foundation; asphalt floor, requiring 446 sq. yds. of asphalt, to be laid by city.

MUSKOGEE, OKLA.—Bids will be received until Sept. 12 by the County Commissioners, Muskogee, for constructing a 120-ft. span steel bridge across Dirdeen Creek, Township 12, Range 20, Muskogee County. W. E. Looper is County Clk.

OKEMAH, OKLA.—The Okfuskee County Commissioners have awarded contract to the MISSOURI VALLEY BRIDGE & IRON CO., of Leavenworth, Kan., at $35,000 for constructing 24 bridges. E. Stine is County Clk.

STILLWATER, OKLA.—The Oklahoma Public Scenic and Interurban Line, Ralph A. Stingeon, Ch. Engr., 1809 Hudson Terminal Bldg., New York, will construct a pile trestle in connection with the railway to be built from Stillwater to Sapulpa, Okla.

NORTH YAKIMA, WASH.—Bids will be received until Sept. 7 by the State Highway Board, Olympia, Henry L. Bowlby, Secy., for constructing five bridges on the line of State Road No. 1, Yakima County, as follows: A 40-ft. span and approaches; three 60-ft. spans and approaches; a 70-ft. span and approaches. R. M. Hardy is Div. Engr., North Yakima.

SEATTLE, WASH.—The Board of Public Works is considering the construction of a bridge across Lake Union at Stone Ave., between Westlake and Kilbourne Aves., a distance of 2,400 ft. Plans, now being prepared by R. H. Thomson, City Engr., call for a bridge 44 ft. wide with 18 ft. in the center reserved for the Seattle Electric Co. and roadways and walks on either side of the tracks. Formal application will be made to Maj. C. W. Kutz, Corps Engrs., U. S. A., for a permit. Estimated cost, $30,000.

ESCALON, CAL.—The Boards of Supervisors of San Joaquin and Stanislaus Counties have awarded to R. C. STONE contract for constructing a steel and concrete bridge over the Stanislaus River, near Escalon, at $29,459.

SONORA, CAL.—J. N. Pickle, County Surv. Tuolumne County, has been authorized by the Supervisors to prepare plans and estimates for the construction of a bridge across Curtis Creek, near Algerine.

SACRAMENTO, CAL.—The Western Pacific Ry. Co. has decided to improve the bridge over the American River north of the north end of 19th St., by removing eight of the piers, which are condemned and replacing them with four larger ones, making the spans 160 ft. instead of 80 ft. T. J. Wycke is Ch. Engr., San Francisco.

SAN DIEGO, CAL.—Charles Steffgen, Granger Bldg., is the lowest bidder at $7,790 for constructing two steel and wooden bridges for the county. Other bids were: Mercereau Bridge & Construction Co., Los Angeles, $8,562; Escondido Construction Co., $8,770; Knight & Hyde, San Diego, $9,650, Standard Iron Works, San Diego, $10,370.

UKIAH, CAL.—The Supervisors have have awarded to J. C. HALLIDAY contract for constructing the Alder Creek bridge at $6,964, to be completed by Nov. 20.

EUREKA, CAL.—Bids will be received by George W. Cousins, Clk., Bd. of Supervisors, until 2 p. m., Sept. 12, for furinishing all materials and labor and the erection of a highway bridge over Eel River at a point near Singley, Humboldt County, in accordance with plans and specifications on file with the Clerk.

WILLOWS, CAL.—Bids will be received by W. H. Sales, Clk. Bd. of Supervisors, until 10 a. m., Sept. 8, for constructing mat work on the west approach to the Gianella bridge in road district No. 2, Supervisors District No. 2, according to plans and specifications on file with the board.

AMERICAN FALLS, IDAHO.—Plans are being prepared by the engineers of the Oregon Short Line R. R., William Ashton, Ch. Engr., Salt Lake City, for the construction of a new steel bridge over the Snake River at American Falls. The new structure will be 14 ft. higher than the present bridge and will be double tracked.

TORONTO, ONT.—Bids were opened on Aug. 9 by the Board of Control for constructing a concrete viaduct. Contract has been awarded to E. C. LEWIS, of Toronto, at $17,166. R. E. Chadwick is Bridge Engr.

BUILDINGS.

*(*Denotes that this work is advertised in Engineering News.)*

MANCHESTER, N. H.—It is reported that bids will be received soon for improvements to be made to the St. Anselmn's College in Manchester, to cost about $300,000. These include the construction of three structures, a faculty building, a chapel and a gymnasium. Rt. Rev. Abbot Ernest, is Pres. of the College.

*MARLBORO, MASS.—Bids were received as follows on Aug. 25, by James Knox Taylor, Suprv. Arch., Treasury Dept., Washington, D. C., for construction of a postoffice building at Marlboro, Mass. J. E. & A. L. Pennock, Land Title Bldg., Philadelphia, $62,780; Richardson & Burgess, Inc., Washington, $63,868; Charles H. Peckworth, 415 Hudson St., New York, $66,756; William Werner, 657 Vanderbilt Ave., Brooklyn, N. Y., $66,544; William H. Fissell & Co., 1133 Broadway, New York, $63,600; Woodbury & Leighton, 210 Devonshire St., Boston, Mass., $62,821.

WOBURN, MASS.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a postoffice at Woburn, to WOODBURY & LEIGHTON, 210 Devonshire St., Boston, Mass., at $53,956. Time to complete, Oct. 1, 1911. Bids were opened on Aug. 9. List of bidders noted on Aug. 11.

NEW YORK, N. Y.—A 12-story apartment house will be erected for the Charter Construction Co., at the southeast corner of Riverside Drive and 88th St., The building will have a frontage of 100 ft. on the drive by 75 ft. on the street, with a fcade of brick, trimmed with limestone and terra cotta, and will be of fireproof construction. The building will be equipped with elevators. Estimated cost, $275,000. Schwartz & Gross, 347 Fifth Ave., are the Archs.

William S. Baker has sold for Sonn Bros., 149 Church St., New York, the plot, 75 × 100 ft. on the south side of 157th St., 200 ft. east of Broadway, to the Sun Construction Co., 1400 Fifth Ave., which will erect an elevator apartment house on the site.

NEW YORK, N. Y.—Bids will be received by the Park Board, until 3 p. m., Sept. 8, for furnishing all the labor and materials necessary for the erection and completion of an addition to greenhouses in Bronx Park, Boro. of the Bronx, City of New York. Charles B. Stover is Pres., and Thoms J. Higgins is Comr.

NEW YORK, N. Y.—The Church-Liberty Leasehold Co. has taken a 21-year lease with two renewals of the northwest corner of Church and Liberty Sts., known as 105, 107, and 109 Liberty St. This property is owned by George N. Robinson. The plot has a frontage on Church St., of 100.8 ft. and about 60 ft. on Liberty St. Herts & Tallant, Archs., 113 East 19th St., are preparing plans for a 9-story building to be erected on the site, to be ready for occupancy about April 1, 1911.

Bids were received by the Department of Docks and Ferries, on Aug. 17, for contract No. 1225, for preparing for and building a steel freight shed with appurtenances, on the pier and adjacent bulkhead at the foot of West 131st St., Boro. Manhattan. The lowest bidder was the Snare & Triest Co., 143 Liberty St., New York, at $38,135. The contract has not yet been awarded.

NEW YORK, N. Y.—Plans were filed recently for a 2-story T-shaped building at Nos. 293 to 297 Bank St., on the south side, beginning 65 ft. east and extending through to Fourth St. Christian Yere is the owner. The building will cost $75,000. It will be occupied by stores and apartments. Justus Smith is Arch.

Plans have been filed for building a 6-story warehouse on property owned by the Corporation of Trinity Church on the north side of Clarkson St., 117 ft. east of Greenwich St. The building will have a frontage of 49.11 ft. and a depth of 100.5 ft., and will be of brick, with limestone trimmings. Charles C. Haight is Arch. Estimated cost is $55,000.

Plans have been filed for the erection of three 6-story warehouses on the south side of North Moore St., 100.4 ft. west of Hudson St., for the Louvre Realty Co., of which Harry Uhlfelder is Pres. The buildings are to have a frontage of 33.5 ft. and a depth of 82 ft. Louis C. Maurer is the Arch. Estimated cost of each is $50,000.

FORT HAMILTON (Brooklyn post-office.) N. Y.—Bids will be received until 11 a. m., Sept. 22, by the Constructing Quartermaster, U. S. A., Fort Hamilton, for the construction, including plumbing, heating, electric wiring and fixtures of one field officers' quarters and one 6-set officers' quarters.

NIAGARA FALLS, N. Y.—Esenwein & Johnson, Archs., 781 Ellicott Sq., Buffalo, are preparing plans for a 6-story and basement hotel of steel, brick and terra cotta, to be erected on the site of the International Theatre, by John F. McDonald, owner of the International and Cataract Hotels here. Estimated cost, $300,000.

NEWBURGH, N. Y.—The West Shore R. R. freight depot at the corner of Fifth and Water Sts., will probably be built, according to reports. W. K. McCoy is Div. Supt., Weehawken, N. J.

BUFFALO, N. Y.—Plans for the Delaware, Lackawanna & Western R. R. terminal in Buffalo, have been completed. According to the "Buffalo Evening News," the company contemplates the erection of a passenger station which will front on the east side of the foot of Main St. Together with its trackage approaches and other terminal improvements it will take in the section from Main St. to Michigan. To do this it is proposed to close the foot of Washington St. and all of the other streets between Main and Michigan Sts., with the exception of Illinois St., which will continue to be a means of reaching the passenger docks of several of the lake lines. The passenger tracks will enter the new station on the second floor. The crossing at grade at the foot of Main St. will be abolished. The freight tracks will be carried across Main St. on a steel trestle.

AMSTERDAM, N. Y.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office building at Amsterdam, to the WESTCHESTER ENGINEERING CO., 103 Park Ave., New York, at $60,580; time, Oct. 1, 1911, bids for which were opened on Aug. 8 and noted on Aug. 11.

MILLBROOK, N. J.—J. D. Barton, Times Sq. Bldg., New York, is planning the construction of a residence at Millbrook, to cost $500,000. JOHN BEDELL, New York, has the contract. It is expected that work will start at once.

PATERSON, N. J.—Plans were filed recently by Francis C. Van Dyk for the erection of a building on Main St., to replace the one destroyed by fire. The plans call for a building five stories high on the Main St. lots and four stories high on the Cross St. side of the property. It will be constructed in a manner to allow the addition of two floors on the Cross St., side, which will eventually give the Van Dyk Furniture Co. 75,000 to 100,000 sq. ft. of floor space to conduct the business. The site has a frontage of 50 ft. on Main St. and 75 ft. on the rear street.

WEST HOBOKEN, N. J.—The contract for constructing Public School No. 7 for the Board of Education has been awarded to CRANWELL & SON, at $53,000.

PHILADELPHIA, PA.—The contract for the building to be erected at the northwest corner of 17th and Walnut Sts., for Herbert D. Allman from plans drawn by Baker & Dallett, Archs., 1629 Chestnut St., has been let to CRAMP & CO., Commonwealth Bldg., Philadelphia. This building, which will be occupied by the Estey Piano & Organ Co., and will be known as the Estey Building. It will be seven stories high and of reinforced concrete and fireproof construction, with exterior walls of terra cotta and Indiana limestone. Work will be begun at once, a permit to demolish the old house on the site having been issued to the contractors. Estimated cost, $135,000.

The Packard Motor Car Co. has purchased a site at Nos. 315, 317, 319 and 321 North Broad St., on which they will erect a 4-story reinforced concrete garage. Albert Kahn and E. Wilby, Trussed Concrete Bldg., Detroit, Mich., Archs., are preparing the plans and will shortly ask contractors for estimates. The cost will be about $200,000.

PHILADELPHIA, PA.—Burton C. Simon, 1544 West Passyunk St., Philadelphia, will erect five 2-story stores and dwellings, 16 × 48 ft., at the northeast and southeast corners of 20th and Hoffman Sts., ten at the northeast and southeast corners of 20th and Dudley Sts., and the northeast corner of 20th and McKean Sts.; fifteen on 20th St., south of Mifflin St. and seven on McKean St., east of 20th.

W. S. Bauer, Chew and Tulpekocken Sts., will erect 17 dwellings, 15 × 45 ft., at 17th and Butler Sts., to cost $75,000.

THE ALLEGHENY IMPROVEMENT CO. will build 52 houses on both sides of Balley St., between Somerset and Cambria Sts., for the Lehigh Realty Co., Stephen Girard Bldg. There will be 2 stories, 16 × 30 ft. each. The cost will be $88,600.

R. J. Aikens is taking estimates on eleven 3-story houses of brick, plaster finished, to be built in Oak Lane. They will be 22 × 54 ft. each, and will cost about $110,000.

PHILADELPHIA, PA.—The plot at 62d and Market Sts., 250 ft. front on Market and 214 ft. on 62d, has been sold to Jacob Edelstein. On this site will be built 46 dwellings, costing $100,000.

Dr. George Woodward, West Willow Grove Ave., Philadelphia, will erect a $100,000 Elizabethan house, 88 × 84 ft., of stone. Peabody & Stearns, 53 State St., Boston, are the Archs.

PHILADELPHIA, PA.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Sept. 28, for miscellaneous changes in the administration building, Philadelphia, Immigration Station (Gloucester, N. J.).

PHILADELPHIA, PA.—CRAMP & CO., Commonwealth Bldg., have been awarded the contract for the erection of a 7-story concrete and terra cotta building for the Estey Piano Co. The building will be 221 × 110 ft., at the northwest corner of 17th and Walnut Sts. The cost is $135,000. Baker & Dallett, 1629 Chestnut St., Philadelphia, are the Archs.

BRADFORD, PA.—Bids were received as follows on Aug. 29 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Bradford: McHenry-Beatty Construction Co., East Liverpool, Ohio, $61,470; William Werner, 657 Vanderbilt Ave., Brooklyn, $57,450; William Hauley, Bradford, Pa., $54,780; William H. Fissell & Co., 1133 Broadway, New York, $58,500; John A. Carter Co., Heed Bldg., Philadelphia, $66,895; Charles W. Peckworth, 415 Hudson St., New York, $59,912; Durolithic Co., 460 Ellicott Sq., Buffalo, N. Y., $63,900; M. P. Wells, Witherspoon Bldg., Philadelphia, $62,597; Ambrose B. Stannard, St. James Bldg., New York, $55,700, and the Westchester Engineering Co., 103 Park Ave., New York, $59,349.

GERMANTOWN (Philadelphia post-office), PA.—J. H. Heath has invited estimates for the erection of 26 3-story flat houses, 20 × 60 ft., at Roberts and Pulaski Sts., Germantown. The cost will be $100,000.

PITTSBURG, PA. — The First Baptist Church of Pittsburg, is ready to award a contract for the erection of a church building, which will be located at Bellefield and Bayard Aves., in the Oakland district. The estimated cost is about $200,000.

The Board of Trustees of the Passionist Nuns of Our Lady of Sorrows, are receiving bids for the erection of a stone convent building in Carrick, which is estimated to cost about $80,000.

ROXBORO (Philadelphia post-office), PA.—Peuckert & Wunder, Archs., 310 Chestnut St., Philadelphia, are preparing plans for an English style residence, garage and gardener's cottage at Ridge Ave. and Harmon St., Roxboro, for Mrs. Mary Obert, to cost $40,000.

WALLBROOK (Baltimore post-office), MD.—C. C. WATTS has been awarded the contract for the erection of the church building for the Prince of Peace Protestant Episcopal Church, at Walbrook. The proposed structure will be at Tenth St. and Walbook Ave. The contract price is $40,000. The plans, which were prepared by A. Cookman Leach, Arch., 323 North Charles St., Baltimore, call for an edifice with a frontge of 43 ft. and a depth of 100 ft.

BALTIMORE, MD.—EDWARD PILERT, 15 East Fayette St., has been awarded the contract to erect a warehouse on the east side of Grant St., between Lombard and Pratt Sts., for William Heyser, 110 East Pratt St. The structure is to be three stories high and have a frontage of 40 ft. on Grant St. and a depth of 60 ft. back to Hollingsworth St., will be brick, fireproof and of mill construction.

Ellicott & Emmart, Archs., Union Trust Bldg., Baltimore, have been commissioned by Lemuel Appold, Vice-Pres. of the Colonial Trust Co., to prepare plans and specifications for his proposed residence to be erected on Charles St. Boulevard and 34th St. Work will be started about Oct. 1 and cost $40,000.

BALTIMORE MD.—Bids are asked by the city for the proposed Public School No. 6, to be erected on Ann St., and Canton Ave., from plans by A. Cookman Leach, 323 North Charles St., Baltimore. C. L. Reeder, Equitable Bldg., is the Engr. The building will be brick and stone two and three stories.

BALTIMORE, MD.—Bids will be received soon by Fred. Shaw, Mgr., of the Metropolitan Insurance Co., Eutaw and Franklin Sts., for a proposed apartment house to be erected on Walbrook Ave. and 13th St., from plans by A. Lowther Forrest, 411 St. Paul St. It will be of brick, four stories, 40 × 80 ft.

BALTIMORE, MD.—Eugene Blake, Mount Washington, Baltimore County, has commissioned Henry J. Tinley, Arch., 314 North Charles St., to prepare plans for his proposed apartment house to be erected at 508-10 South Ann St. It will be a brick building and have three stories and a basement, with a frontage on Ann St. of 27 ft. and a depth of 150 ft.

The New Era Realty & Construction Co., 3440 Highland Ave., Baltimore, has awarded the contract to ISRAEL SILBERSTEIN, Equitable Bldg., for the erection of the proposed apartment house to be erected at Brookfield and Whitelock Sts., from plans by Louis Levi, American Bldg. It will be 78 × 80 ft., four stories, of pressed brick and stone, with marble trimmings, interior hardwood finish, fireproof, electric lighting and hot water heating. Estimated cost, $80,000.

Bids are being taken by Mottu & White, Archs., Professional Bldg., for the proposed warehouse to be erected on the southeast corner of Hanover and Lombard Sts. for the A. C. Meyer Co., 118 West Lombard St. It will have six stories and will cost about $40,000.

SYKESVILLE, MD.—The Board of Directors of the Springfield State Hospital, care of Gov. A. L. Crothers, has commissioned Parker, Thomas & Rice, Archs., Union Trust Bldg., Baltimore, to prepare plans and specifications for the proposed cottage for Indigent Insane to be erected at Sykeville, Carroll County. The building will be of brick, two and three stories. Bids will soon be asked.

WASHINGTON, D. C.—A theatre and office building is to be erected at 15th and Y Sts., N. W., Washington, to cost, $900,000. J. H. de Sibour, The Hibbs Bldg., Washington, is the Arch.

NEW ORLEANS, LA.—James Knox Taylor, Superv. Arch., Treasury Dept. Washington, D. C., has altered the contract of WELLS BROS., 366 Fifth Ave., New York, by providing for a marble exterior for the New Orleans post-office at an additional cost of $210,500.

BRISTOL, TENN.—A contract will be let soon for the plans and specifications for the modern edifice to be erected by the First Baptist church of this city, which will cost about $40,000. The Rev. J. M. Shelburne, D. D., may be addressed.

MEMPHIS, TENN.—Bids are now being received in Memphis for an apartment house, to be erected at the corner of McLemore Ave. and South Wellington St., by Dr. Hugh R. Bynum. The construction will be of brick and stone. Francis M. Barton, 821 Medinah Temple, Chicago, is the Arch. The cost will be $200,000.

CLEVELAND, OHIO.—The city has authorized issue of bonds for the following improvements: $200,000 for erecting public halls and offices; $150,000 for erecting market house and providing market places; $50,000 for park improvements; $90,000 for erecting buildings, fire boats, water towers, fire cisterns, and placing underground wires and other signal appratus for the fire department. Robert Hoffman is City Engr.

PORTSMOUTH, OHIO.—All bids for the construction of the high school building, which were opened Aug. 15, have been rejected by the Board of Education as excessive. About $200,000 is available for the work. Plans will be revised.

SANDUSKY, OHIO.—Bids will be received by the Board of Trustees of the Ohio Soldiers' and Sailors' Home at Sandusky, until noon, Sept. 7, for furnishing the materials and performing the labor necessary to erect the nurses' cottage and warehouse, from plans drawn by Frank L. Packard, 1212 Hayden Bldg., Columbus, Arch. J. L. Cameron is Secy. of the Board.

TOLEDO, OHIO.—A 2-story addition, 100 × 200 ft., is to be built to the building of the Lasalle & Koch Co., on Superior St., which is now four stories high. Alfred B. Koch is one of the officers of the company.

MISHAWAKA, IND.—Bids will be received until 6 p. m., Sept. 16, for the construction of a fire department house. James L. Kennedy is City Clerk.

SHELBYVILLE, IND.—Owing to a disagreement the contract awarded for a high school building here, at $72,670, has been declared void. The School Board will ask for new bids at once.

INDIANAPOLIS, IND.—William H. Block, 7 East Washington St., has ordered plans for the construction of a 7-story business and office block on the site of the Windsor block. Bids will be asked for soon.

The Trustees of the Methodist Hospital have ordered plans on which bids will be received for the construction of an addition to the present hospital building. The estimated cost is $100,000. Charles W. Fairbanks is Pres. of the Hospital Board.

The Denisen Hotel Co. has ordered plans for the construction of a 16-story hotel at Ohio nad Pennsylvania Sts. The old building will be razed as soon as the contract is let and leases expire.

Bids will be received about Oct. 1 for a 6-story fireproof hotel, 60 × 250 ft. of steel, brick and stone, to be built by the French Lick Springs Hotel Co. D. A. Bohlen & Son, Majestic Bldg., Indianapolis, are the Archs.

ADRIAN, MICH.—Peter Dederich, Chamber of Commerce Bldg., Detroit, has just been commissioned to prepare plans for a school building for the St. Joseph's Academy, Adrian.

DETROIT, MICH.—Joseph L. [illegible] has purchased a lot 60 × 110 ft. at Broadway and Grand River Aves., on which he will erect a store and office building.

MONROE, MICH.—Van Legen [illegible] E. A. Schilling, 1117 Union Trust Bldg., Detroit, Mich., have received bids on a [illegible] school for the Board of Education, Thomas Waters, Secy. Bids are under consideration as an additional $50,000 of bonds has [illegible] been voted, making a total of $100,000. [illegible] building is to be two stories and basement, [illegible] × 79 ft.

OTSEGO, MICH.—J. H. Daverman & Son, Murray Bldg., Grand Rapids, Mich., let the following contracts on Aug. 4, for the 3-story and basement school, 87 × [illegible], of 12 rooms, for the Board of Education, L. W. Fast, Secy. Heating to LEFFEL [illegible] IRON WORKS CO., Grand Rapids, Mich. Plumbing to SEVERY & SCHOOLCRAFT, Otsego. The building is to cost $60,000.

STAMBOUGH, MICH.—John [illegible] Chubb, 112 South Clark St., Chicago, Ill., let the following contracts on Aug. 5, for the Board of Education of Stambough, for their 2-story and basement school building. The general contract to FOSTER CONSTRUCTION CO., 301 Caswell Bldg., Milwaukee, and steam heating contract to THOMAS HOYE HEATING CO., 54 Biddle St., Milwaukee. Cost, $35,000.

DETROIT, MICH.—The Michigan Central R. R. Co., R. H. L'Hommedieu, Gen. Mgr., 43 M. C. R. R Depot, has bought a site at Woodward Ave. and M. C. R. R. and will build a depot, 127 × 500 ft., it is stated.

Smith, Hinchman & Grylls, 710 Washington Arcade, Detroit, are taking figures on a 2-story and basement auto garage, 90x190 ft., for the Estate of G. J. Riche, care of the architects. The garage is to be of pressed and stock brick, terra cotta, with a composition roof, galvanized iron skylight, structural iron, hardwood finish, cement floors, granolithic tiling and electric fixtures. Cost, $48,000.

SAGINAW, MICH.—Shattuck & Hussey, Archs., 153 La Salle St., Chicago, Ill., are preparing plans for a $60,000 Young Men's Christian Association building, fireproof construction, at Saginaw. W. . Cooper, Arch., of Saginaw, will superintend the construction.

CHICAGO, ILL. — John Ahlschiager & Son, Arch., 70 La Salle St., let the masonry contract to J. ZULEWSKI, for a 2-story hospital, 50 × 120 ft., to cost $60,000, at 5415 to 5425 South Morgan St., for the German Evangelical Deaconess Hospital. The building will be of brick construction with steam heating.

CHICAGO, ILL.—Alfred Alschuler, Arch., Steger Bldg., has let the steam heating contract to JOHN R. KEHM, 443 North State St., for a 3-story building, 70 × 125 ft. and 100 × 150 ft. at Grand Boulevard and 46th St., for the Sinai Congregation, Rev. E. G. Hirsch. The total cost is $350,000.

A. Sandegren, Arch., 164 Dearborn St., Chicago, is receiving estimates on twelve apartments, three stories, 80 × 100 ft. at Kenmore and Hollywood Aves., for R. E. Swenson. The building will be of pressed brick construction, with steam heat, oak trim and floors, marble and mosaic work. Cost, $40,000.

Holabird & Roche, Archs., 98 Jackson Boulevard, Chicago, are receiving estimates on a 15-story building to cost $2,000,000, at the northeast corner of State and Madison Sts., for Mandel Bros. It will be of steel and tile, fireproof construction, marble mosaic, with ornamental iron works, steam heating, electric elevators, pressed brick and granite and terra cotta exterior.

Holabird & Roche, Archs, 98 Jackson Boulevard, Chicago, are completing plans for a 16-story building to be erected at 191 to 197 Washington St., for the Chicago Telephone Co. It will be of steel and tile and fireproof construction.

ROCKFORD, ILL.—We are advised that the general contract for erecting a school in Rockford has been awarded by the Board of Education to W. H. COOK, Rockford, and the heating contract to McGUIRE BROS. The building will be two stories high, 73 × 115 ft., and of fireproof construction. Estimated cost, $65,000. J. C. Llewellyn & Son, 164 Dearborn St., Chicago, are the Archs.

MILWAUKEE, WIS. — The Chicago & North-Western Ry. Co. has secured a building permit for a new passenger station to be erected at National Axe. It will be one story high, 26 × 92 ft. with solid brick walls and concrete floors. E. C. Carter is Ch. Engr., at Chicago, Ill.

MILWAUKEE, WIS.—Plans are being prepared for a main building and two branch buildings to be erected by the Second Ward Bank. The main structure will be at Third and West Water Sts., one branch at North Ave. and Third St. and the other at Twelfth and Vliet Sts. The branches will be constructed of stone and brick, with steel reinforcements, in renaissance style. Kirchhoff & Rose, Majestic Bldg., are the Archs.

LA CROSSE, WIS.—PETER NELSON has been awarded the contract for the erection of the St. Michael's orphan home in this city, at $70,271. The building will be three stories high, 77 × 202 ft., and of brick with Medford stone trimmings. The contract also includes an engine house and hospital. The hospital will be 44 × 51 ft. and two stories in height.

PLATEVILLE, WIS.—Bids will be received until 3 p. m., Sept. 29, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the approaches at the U. S. post-office at Plateville.

FERGUS FALLS, MINN.—The State Board of Control, Charles Halvorson, Chn., St. Paul, has awarded the contract for an addition to the kitchen building at the Asylum for the Insane at Fergus Falls, a laundry and an operating room, to JOHN LAURITZEN, Fergus Falls, at $56,424. C. H. Johnston, St. Paul, is Arch.

ROCHESTER, MINN.—The State Board of Control is having plans prepared by the State Arch., C. H. Johnston, 715 Capital Bank Bldg., St. Paul, for the construction of a 3-story pressed brick and cut stone, fireproof detention hospital to be built at the State Hospital for the Insane, at Rochester. Charles Halvorson is Ch. of the Board. Cost, $60,000.

MINNEAPOLIS, MINN.—W. F. Andrews plans to erect a building 66 × 150 ft., on his property on Fourth St., between Third and Fourth Aves., south. It will be three stories and basement, for stores and offices, and capable of carrying more floors. The building will cost $40,000.

ELLENDALE, N. DAK.—The Board of County Commissioners of Dickey County awarded the contract on Aug. 22 to the INGEMANN CO., 1960 St. Anthony Ave., St. Paul, Minn., for the construction of the 2-story cut stone, fireproof court-house and jail, at $80,000. Buechner & Orth, 601 Capital Bank Bldg., St. Paul, are the Archs.

ST. LOUIS, MO.—Bids were received as follows on Aug. 26 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for installing the heating and ventilating system at the St. Louis post-office: Fitzpatrick Hoepfner, Columbus, Ohio, $89,888; S. Faith & Co., 2427 Pennsylvania Ave., Philadelphia, $93,339; Moterne Mfg. Co., St. Louis, Mo., $93,219; Hanley-Casey Co., 37 Ohio St., Chicago, $76,650; Bradley Heating Co., 3834 Olive St., St. Louis, $98,620, and the G. A. Kees Domestic Engineering Co., St. Paul, Minn., $89,200.

ST. LOUIS, MO.—The RAYMOND CONCRETE PILE CO., 90 West St., New York, has been awarded the contract for the Raymond concrete piles and foundations for a warehouse for the Nielson Investment Co., St. Louis. Baker & Knell, Odd Fellows Bldg., St. Louis, are the Archs.

The Benjamin Franklin Realty Co. has obtained a building permit for the erection of a 4-story mercantile building at 517 to 529 Morgan St., to cost about $50,000.

WACO, TEX.—The O. H. S. Kress Co., has purchased a site on Austin Ave., near Seventh, and will erect there a building to cost about $40,000.

HOUSTON, TEX.—We are advised that the contract for erecting a 9-story office building for the "Sunset-Central" (Southern Pacific Ry.) will be awarded at once. The William Miller & Sons Co., 28 Federal St., Pittsburg, Pa., submitted the lowest bid, which calls for building and plumbing only. The contracts for power, heat, electrical wiring, elevators and other fixtures will be let to special contractors. The construction will be of steel framework, imbedded in concrete, on a lot facing 174.5 ft. on Travis St. and 145 ft. on Franklin Ave. The building will contain a floor space of 130,000 sq. ft. Estimated cost, $725,000.

HOUSTON, TEX.—Work will commence soon on the construction of a 4-story brick building to cost approximately $150,000 for the Armour Packing Co. of Chicago, according to an announcement by Felix Thachior, Jr., local representative of the company. The building will be located at Fannin St. and Commerce Ave. on the site of the old building which was destroyed by fire. It will cover a ground space of 85 × 100 ft. Plans for the building are being drawn in Chicago.

HOUSTON, TEX.—Plans are being prepared by Cooke & Son, Archs., Dunn Bldg., Houston, for a warehouse to be erected for the American Brewing Association. The building will be of fireproof construction.

PORT ARTHUR, TEX.—Capt. A. Tyrrell, of Beaumont, plans the erection of a vaudeville theatre in Port Arthur. The building will be two stories high, 75 × 140 ft., and of brick construction.

SAN ANTONIO, TEX.—A 12-story building, 116 × 169 ft., to be known as "The People's Church," will be built on the site of the Travis Park Methodist Church, at Navarro and Travis Sts., at a cost of $500,000. A. B. Stephens, H. E. Hilderbrand, and Rev. S. H. C. Burgin are members of the Church Committee.

SEATTLE, WASH.—Bresemann & Durfee, Archs., Central Bldg., have opened bids for the general contract for the construction of the 4-story concrete hotel building, 90 × 115 ft., for Col. Henry Landis, at the corner of Ninth Ave. and Jackson St., and the contract will be awarded soon. Estimated cost, $45,000.

Plans have been completed by Beezer Bros., Northern Bank & Trust Co. Bldg., Seattle, and are now being inspected by the City Building Department for the superstructure of the 1-story brick church, 107 × 197 ft., at 5049 Ninth Ave. Northeast, for the Church of the Blessed Sacrament. It will cost about $100,000.

The C. H. Lilly Co. has awarded to the PUGET SOUND BRIDGE & DREDGING CO., Central Bldg., Seattle, the general contract for the first building, a concrete hay warehouse, of their manufacturing plant to be located on the West Waterway. The contract covers a unit of a plant that will embrace six concree buildings to be used respectively as feed, grain and flour warehouses, fertilizer plant and flour mills, all of which will be six stories in height and approximately 80 × 120 ft. A number of grain tanks will also be erected, which, including conveyors throughout the plant, will cost about $250,000. The Puget Sound Bridge & Dredging Co. prepared the plans for the hay warehouse, which will be 210 × 104 ft., and about 30 ft. high, and construction work will be started at once. Plans are now being prepared for the remainder of the plant by the Puget Sound Bridge & Dredging Co.

SEATTLE, WASH.—According to reports, a 3-story building, 60 × 108 ft., is to be erected by Martin Paup at First Ave. and Blanchard st. The walls are to be of solid brick, with floors and interior partitions of heavy mill construction. The total cost is $46,000. GEORGE C. DIETRICH, Globe Bldgs., Seattle, has the contract.

PORTLAND, ORE.—Plans are being prepared by D. C. Lewis, Couch Bldg., Portland, for the erection of a 4-story reinforced concrete garage building, cost of which will be $90,000.

LONG BEACH, CAL.—H. M. Patterson, O. T. Johnson Bldg., Lost Angeles, is preparing plans for a 9-story reinforced concrete store and apartment building, 78 × 75 ft., to be erected at Long Beach for the United States Trust Co., 206 Mercantile Pl., Los Angeles. Estimated cost, $350,000.

On a $150,000 lot purchased on the water front at Long Beach, the Pacific Electric Ry. Co. will construct a 6-story steel and concrete station and office building at a cost of about $350,000. The engineers of the company are now preparing designs, which will be completed in about 90 days. The appropriation for the improvement is available, the railroad officials say, as soon as the architects complete their drawings. The site for the new station is 135 × 175 ft., located on the beach. C. A. Henderson is Purchasing Agt., Los Angeles.

LOS ANGELES, CAL.—George H. Wyman, Henne Bldg., Los Angeles, has awarded contract to the ALTA PLANING MILL CO., Eighth and Alameda Sts., Los Angeles, for the erection of the Ferguson 5-story steel, concrete and brick office building at Third and Hill Sts., at $122,265.

LOS ANGELES, CAL.—ALPETER, HALL & ALPETER, Henne Bldg., have been awarded the general contract for the erection of a 2-story brick wholesale building, 119 × 150 ft., on Central Ave., for S. M. Bernard. Estimated cost, $43,382.

A. C. Martin, Arch., H. W. Hellman Bldg., has awarded contracts as follows for the erection of an addition to the Ramona Convent, near Alhambra: General contract to J. A. CROOK, 4524 Finley Ave., at $48,112, and the plumbing to the THOMAS HAVERTY CO., 517 South Los Angeles St., Los Angeles.

RENO, NEV.—The Y. M. C. A. has accepted plans for a building, and bids for the erection will be called for at once. The building will cost $55,000, and the furnishings $35,000.

SALT LAKE CITY, UTAH.—The Oregon Short Line R. R. will have plans drawn soon for a 6-story terminal building for its general offices. Estimated cost, $150,000. William Ashton is Ch. Engr., Salt Lake City.

ARTHABASKA, QUE.—Bids will be received until Sept. 7 for the construction of a public building by R. C. Desrochers, Secy. Dept. of Pub. Wks., Ottawa.

ROBERVAL, QUE.—Bids are asked until Sept. 12 for the construction of a public building by R. C. Desrochers, Secy. Dept. of Pub. Wks., Ottawa.

PETERBORO, ONT.—Bids will be received until Sept. 3, for the erection of new buildings for the Murray St. Baptist Church. Burke, Horwood & White, 28 Toronto St., Toronto, are Archs.

WATER SUPPLY—IRRIGATION.

(*Denotes that this work is advertised in Engineering News.)

GREENFIELD, MASS.—DANIEL O'CONNELL & SONS, of Holyoke, Mass., have been awarded contract by the Water Commissioners for the construction of the new Rocky Mountain Reservoir at $33,917. Other bidders were: P. A. Breglio, $39,949; John E. Palmer, $40,874; Field, Barker & Underwood, $46,393; R. H. Newell & Co., $40,325; Crosby & Parker, $44,990 (for completion by Dec. 1); P. A. Greglio, $37,257; John E. Palmer, $36,924; Field Barker & Underwood, $41,118 R. H. Newell & Co., $36,425; Daniel O'Connell's Sons, $33,917; Crosby & Parker, $38,900 (for completion by June 1).

Contract for furnishing c.-i. pipe and special castings has been awarded to R. D. WOOD & CO., 400 Chestnut St., Philadelphia, at $22.95 per ton or about $19,000.

NEW YORK, N. Y.—Plans have been filed for a water tower to be erected in conjunction with an automatic fire extinguishing plant in the yards of the Manhattan Ry. Co., at the northeast corner of the Speedway and 159th St. The tank will be of steel, 20 ft. in diameter, 35 ft. high, supported on a steel tower 125 ft. high, giving the entire structure a total height of 160 ft. George H. Pegram is Ch. Engr. Estimated cost, $6,500.

NEW YORK, N. Y.—Bids were received as follows on Aug. 18 by the Department of Bridges for laying and relaying water and gas mains and grading and paving streets adjacent to Municipal Building: John Williams, $38,900; Bradley Contracting Co., $39,274; R. E. Fox, $39,400.

NEW YORK, N. Y.—See item under Streets and Roads.

*THIELLS, N. Y.—Bids for water and sewerage system at Letchworth Village, Thiells, will be received by Franklin B. Kirkbride, Secy. Bd. of Managers of Letchworth Village, Room 215, No. 55 Wall St., New York, until 10.30 a. m., Sept. 27. For details see advertisement in this issue.

LANCASTER, PA.—The City Council has authorized the issuance of $75,000 of bonds for the improvement of the water system.

FORT HOWARD, MD.—Bids will be received by the Constructing Q. M., U. S. A., until Sept. 26, for constructing three reinforced-concrete cisterns and piping; also painting steel water tanks and towers.

*PARKERSBURG, W. VA.—Bids are asked until 7 p. m., Sept. 14, by the Board of Affairs for building pump well, pipe gallery, and foundations; for furnishing and erecting two 4,000,000-gallon vertical pumping engines, and for furnishing and erecting two 200-HP. water-tube boilers, 160 lbs. pressure. Frank Good is Audr.

ROCK MART, GA.—The city has voted $25,000 of bonds for the construction of water-works. I. F. Mundy is Mayor.

DALTON, GA.—The city is considering the purchase of the Crown Cotton mills property just outside the north limits of the city for the construction of a new water-works and electric light system. The top of Mount Rachel will probably be used and a reservoir of 1,000,000 gallons constructed.

EASTMAN, GA.—The citizens on Aug. 17 voted to issue $58,000 of bonds for improvements to water-works, sewer and schools. Arthur Pew is Engr., Atlanta.

PORT TAMPA CITY, FLA.—The city has voted $25,000 of water-works bonds.

LAKELAND, FLA.—The city will improve the water and light plant, for which $18,000 of bonds have been issued, and will extend the water mains, for which $22,000 of bonds are available.

ALBERTVILLE, ALA.—The city has voted $25,000 of bonds for the construction of water-works.

LEAKESVILLE, MISS.—Greene County will construct a water tank and tower, gasoline engine, pump and pumphouse, and lay all necessary piping for use of county jail for sanitary purposes. Bids will be received until Sept. 5. S. R. McKay is Clk.

OSYKA, MISS.—See item under Light and Power Plants.

WEST CARROLLTON, OHIO.—The city has voted $20,000 of bonds for the construction of water-works plant and electric light plant.

SOUTH CHARLESTON, OHIO.—The city is considering the construction of a water-works plant. Estimated cost, $35,000.

NEWBURG (Cleveland post-office), OHIO.—Bids will be received until Sept. 17 by J. W. Shimek, Clk., Bd. Control, for furnishing material and constructing water mains in portions of Buckeye Road East, 115th and Union Sts., and sewers in East 130th St., Aetna Road, and Anderson Ave. The William H. Evers Engineering Co. are Engrs., 332-4 The Arcade, Cleveland.

NEWARK, OHIO.—The City Council has passed an ordinance directing the purchase of the plant of the Newark Water Co. from H. M. Verrill, of Portland, Me., for $100,000. This sum includes $23,000 due the old company for water rental.

CHARDON, OHIO.—The city is having plans prepared for the construction of water-works and a sewage disposal plant.

UTICA, OHIO.—Contracts for the construction of a municipal water-works system from plans by S. S. Wyer, Engr., Harrison Bldg., Columbus, have been awarded by the city as follows: To the WEINMAN PUMP MFG. CO., of Columbus, for pumping machinery, consisting of two extra heavy deep well pumps; for c.-i. pipe to the U. S. CAST IRON PIPE & FOUNDRY CO., of Columbus. The general contract for labor and installation was awarded the CANTRELL CONSTRUCTION CO., of Parkersburg, W. Va. Noted on Aug. 4.

MUNCIE, IND.—The Board of Public Works on Aug. 16 adopted a resolution instructing the Muncie Water Works Co. to extend its mains in Wysor St., from Elm St. to Plum St., and thence south in Plum St. to Gilbert St. By making this extension the chain of the water-works system in the north part of town will be completed.

CAMBRIDGE CITY, IND.—The citizens have voted to issue $8,000 of bonds for improving the water and electric light plant. The city is now considering plans.

BIG RAPIDS, MICH.—The city proposes to make improvements to the water-works, including new water-wheels, electric motor, pump and cement flume. Estimated cost, $30,000. Gardner S. Williams, of Ann Arbor, is Engr.

HARBOR SPRINGS, MICH.—George H. Fenkell, of Detroit, Mich., is preparing plans for the construction of a new water-works plant for the city to cost $30,000. A bond issue has been carried and bids will be asked soon. Installation includes pump, pumping station, pipe and approximately ten miles of water mains.

CHICAGO, ILL.—Contract for three 350-HP. water-tube boilers at the 68th St. pumping station has been awarded to the EDGE MOOR IRON CO., of Edge Moor, Del., at $12,200.

TOULON, ILL.—Bids will be received until Sept. 15 by Arthur Shinn, City Clk., for furnishing and erecting a 50,000-gallon steel tank and tower.

ROSSVILLE, ILL.—Bids will be received by the city until Sept. 9 for deep well pumps, boilers and pump house. Estimated cost, $6,000. Hugh M. Price is Consulting Engr.

CENTRALIA, ILL.—We are officially advised that contract for constructing a dam for the Centralia Water Supply Co., at Centralia, was awarded on Aug. 20 to JOHN D. VOGT, of Belleville, Ill. The work will amount to about $22,000. The contract for constructing the pipe line, gate house, and spillway, amounting to about $77,000, was awarded to H. H. HALL, 535 Murphy Bldg., East St. Louis, Ill. The Harper Engineering Co., East St. Louis, are Engrs.

WALWORTH, WIS.—The citizens have voted to issue $18,000 of bonds for the construction of water-works.

LA CROSSE, WIS.—The City Council has voted to submit to the people at the fall election the plan to issue $250,000 of bonds for the construction of a new city water plant. It is proposed to lay mains from the Mississippi River into a sedimentation bed. Estimated cost of plant, $307,000.

STUART, IOWA.—The lowest bid opened on Aug. 16 by the city for a tank and tower was submitted by the Des Moines Bridge & Iron Co., of Des Moines, at $5,248.

*SIOUX CITY, IOWA.—Bids will be received by the City Clerk until 9 a. m., Sept. 17, for the installation of a deep well tubing, centrifugal pumping outfit, and station. Specifications are on file at the office of G. B. Healey, Supt. of Parks.

RED LAKE FALLS, MINN.—We are officially advised that the city is considering the construction of water-works and sewerage, the builders to take the contract with the city for annual payments. Estimated cost, $10,000. T. A. Duffy is Mayor.

WORTHINGTON, MINN.—We are officially advised that the city is considering the construction of a steel stand pipe or wooden tank with a capacity of 150,000 or 200,000 gallons. William Ronan is Mayor.

FERGUS FALLS, MINN.—We are officially advised that the city is considering rebuilding the city dam. Hans P. Blegen is City Engr.

ST. PAUL, MINN.—The Water Board on Aug. 10 awarded contract to the ROBINSON, CARY & SANDS CO., of St. Paul, for furnishing two large pumps at $14,820. They will be installed at Centerville lake pumping station and have a combined capacity of 25,000,000 gallons daily.

BOTTINEAU, N. DAK.—Bids will be received until Sept. 5 by D. R. Carlson, City Audr., for furnishing material and constructing a deep well, 36-in. diameter, and a deep well 24-in. in diameter.

WINNER, S. DAK.—A company has been organized here by local capitalists for the purpose of installing a modern water-works system. The company has a capital of $10,000. The officers are: George W. Mitchell, Pres.; D. A. Sinclair, Secy.; C. S. Rice, Treas. Work will be commenced at once.

WORLAND, WYO.—The city has sold bonds for $40,000 for the construction of a water-works system. Work will be commenced at once.

EL PASO, TEX.—The city on Aug. 13 decided to buy the plant of the International Water Co. for $927,000 and borrow from the company $150,000 with which to enlarge, improve and extend the plant.

HEARNE, TEX.—The city is considering the construction of a water-works system. C. L. Dillard may be addressed.

ALVA, OKLA.—We are officially advised that the city is considering the construction of a steel tower and laying about 5,000 ft. of 4 and 8-in. water mains. Bids will be asked about Sept. 20. G. W. McNeeley is Mayor.

KREBS, OKLA.—The citizens on Aug. 16 voted to issue $10,000 of bonds for water main extensions.

*MONTROSE, COLO.—We are officially advised that bids were received as follows on Aug. 12 by the U. S. Reclamation Service for furnishing approximately 5,224 ft. of 26-in. and 36-in. pipe for siphons in connection with the Uncompahgre irrigation project, Colo.: (a) Item (1)—3,808 ft. riveted steel pipe, 26 ins. inside diameter, and 3,808 ft. riveted ingot iron pipe 26 ins. inside diameter; and (b) Item 2—416 ft. riveted steel pipe, 36 ins. inside diameter; and 1,416 ft. riveted ingot iron pipe, 36 ins. inside diameter. Contract has been awarded to RITER-CONLEY MFG. CO., Pittsburg, at (a) $4.10 and $5.10 per ft., respectively, and (b) $5.48 and $6.28.

FORT COLLINS, COLO.—According to the Denver, Colo., "News," 11 plats covering claims on reservoirs were filed in the County Clerk's office, Fort Collins, on Aug. 11, by the North Poudre & Weld County Reservoir & Ditch Co., of Denver. The system contemplates also the building of fourteen reservoirs in Larimer and Weld Counties, at a cost of $2,000,000 and the enlargement of the Halligan reservoir by increasing its height to 125 ft.

CONCONNELLY, WASH.—The city is considering issue of $5,500 of bonds for water-works.

ALTURUS, CAL.—The Town Board of Trustees have selected Sloan & Robson, Consulting Engrs., San Francisco, to prepare estimates for the construction of water and sewerage systems.

FLORENCE, ARIZ.—The Casa Grande Land, Power & Development Co. has been incorporated to install a large pumping plant in Casa Grande Valley for irrigation purposes.

MOOSE JAW, SASK.—Contract for laying 3,286 lin. ft. of c.-i. water main, bids opened Aug. 15, has been awarded by the city to PATRICK KILKENNY, of Moose Jaw, at $13,975.

MULVANE, KAN.—The citizens have voted to issue $30,000 of bonds for the construction of water-works.

SEWERS.

(*Denotes that this work is advertised in Engineering News.)

GREENFIELD, MASS.—Bids have been received for the construction of a concrete and pipe sewer of 24 and 30-in. diameter. R. H. Newell & Co., Uxbridge, Mass., the lowest bidders, have been recommended for award. Estimated cost, $35,000. H. G. Chapin is Town Engr.

BOSTON, MASS.—The following bids were received on Aug. 24, for building the Canterbury St. branch of the Stony Brook sewer: J. C. Coleman & Sons, $19,623; Jones & Meehan, $19,637; G. M. Bryne Co., $20,086; Coleman Bros., $20,474; P. W. Hill, $20,477; L. D. Mullen, $20,784; Murphy & Dolan, $21,108; J. A. Costello & Co., $22,132; L. de Vincenzi, $22,378; A. M. Cusack, $24,577; J. J. Falvey, $28,287; J. H. Ferguson, $31,191. William Jackson is City Engr.

TORRINGTON, CONN.—Contract for the construction of the McKinley St. outfall sewer and laterals in Central Ave. and Center St., bids for which were received Aug. 22, has been awarded to H. S. DRISCOLL & CO., Torrington, Conn., at $3,808. Other bidders were: C. A. Rossi, Torrington, $3,814; Ambrose Robbiatti, Torrington, $4,133; O'Neil Bros. & Nero, Hartford, $7,050; Bernardino & Silvestri Hartford, $4,365; Edward McManus, Waterbury, $5,425. W. A. Williston is Boro. Engr.

ROCHESTER, N. Y.—Bids will be received by the Commissioners of Public Buildings of the County of Monroe, until 10 a. m., Sept. 3, for the construction of a sewage disposal plant, etc., and a group of buildings to be used for a Tuberculosis Hospital, which is to be erected on the Monroe County Farm, situated at the corner of Henrietta and Westfall Roads. Crandall & Strobel, Ellwanger & Barry Bldg., are the archs. All bids to be addressed to Thomas J. Bridges, chairman.

ROCHESTER, N. Y.—Contracts were awarded Aug. 18 for the construction of sewers in Humboldt, Hampden, and Marion Sts., by the Board of Contract and Supply to WILLIAM H. SOURS, at $24,013. Edwin H. Fisher is City Engr.

ALBION, N. Y.—C. A. Ingersoll of Medina, N. Y., has been engaged by the city to make a survey and prepare maps for the installation of a municipal sewer system.

AMSTERDAM, N. Y.—Contract for the construction of a storm sewer in Voorman Ave. has been awarded to M. SOLECITO of Amsterdam, at $3,271. F. E. Crane is City Engr.

NEW YORK, N. Y.—See item under Streets and Roads.

*THEILLS, N. Y.—See item under Water Supply-Irrigation.

BROOKLYN, N. Y.—Bids will be received by Alfred E. Steers, Borough Pres., until 11 a. m., Sept. 14, for the construction of sewers in various streets.

NEWARK, N. J.—Contract was awarded Aug. 25, for constructing the Weequahic outlet sewer, 18 in. vitrified pipe, 4,500 ft. in length, to the JERSEY PAVING CO., at $5,917. Morris P. Sherrerd is City Engr.

TRENTON, N. J.—Bids will be received until Sept. 6 by the Common Council for constructing sewers in Turpin St., Klagg and Ingham Aves. Harry B. Salter is City Clk.

TRENTON, N. J.—See item under "Streets and Roads."

TRENTON, N. J.—The State Board of Health has approved plans for the construction of a sewer in Kirkbride Ave.

NEW WILLMINGTON, PA.—Contracts have been awarded by the City Council for the erection of a concrete disposal plant to GEORGE AXE of New Willmington at $4,800. Work on the plant will begin Sept. 1, to be completed within 60 days.

ALLENTOWN, PA.—Contracts will probably be let to Geo. H. Hardner, lowest bidder, of this city, for construction of six storm water sewers, in various sections of the city. The bids follow: Lehigh St., from Lehigh Creek to Auburn St., George H. Hardner, $5,190; Weaver Contracting Co., $5,967; Ryan & Reilly, $6,711. Sumner Ave. from Eighth St. to Tenth St., George W. Hardner, $17,541; Weaver Contracting Co., $17,779; Flanigan & Son, $23,017; Ryan & Reilly, $25,158. Charles D. Weirbach is City Engr.

SCRANTON, PA.—Contract has been awarded for constructing the Tenth Ward sewer to FABRIZIO D'ANDREA. Estimated cost, $35,000.

BALTIMORE, MD.—The Hampden Sewerage Commission will construct a 12-in. tile sanitary sewer in the territory bounded by 33d St., Wellington, Chestnut and Elm Aves. The sewer will connect with the city's proposed sewer system. R. F. Reynolds is Pres.

WASHINGTON, D. C.—Bids were received as follows on Aug. 29 by the Commissioners of the District of Columbia for sewers: (a) Warren F. Brenizer & Co.; (b) Howard R. Bitting; (c) E. G. Gummell; (d) George Hyman; (e) Ryan & Reilly; (f) R. J. Beall Construction Co.; (g) James A. Coyle; all of Washington:

Cleveland Park, Sewer "A"—ordinary excavation, (a) 50 cts., (b) 57.5 cts., (c) 85 cts., (d) 65 cts.; sewer brick masonry, (a) $13; (b) $14.50, (c) $16, (d) $14; 12-in. diameter sewer pipe, (a) 60 cts., (b) 65 cts., (c) 57 cts., (d) 55 cts.; 10-in. pipe, (a) 50 cts., (b) 54 cts., (c) 47 cts., (d) 45 cts.

Sewer "B"—ordinary excavation, (a) 90 cts., (b) $1.25, (c) $1.50, (d) 65 cts.; sewer brick masonry, (a) $13, (b) $14.50, (c) $16.80, (d) $14; 12-in. pipe, (a) 65 cts., (b) 68 cts., (c) 57 cts., (d) 55 cts.

Piney Branch Trunk Sewers, "A"—excavation, (a) 60 cts., (d) 25 cts., (e) 40 cts., (c) 49 cts; vitrified brick masonry, (a) $20, (d) $19, (e) $21.50, (c) $19.40; concrete masonry "B," (a) $7, (d) $7.60, (e) $8.76, (c) $7.16; concrete masonry "C," (a) $6.75, (d) $7.25, (e) $8.08, (c) $7.24.

Sewer "B"—excavation, (a) 55 cts., (d) 40 cts., (e) $1, (f) 50 cts., (c) 49 cts.; vitrified brick masonry, (a) $20, (d) $19, (e) $22, (f) $20, (c) $19.40; concrete masonry "B," (a) $7, (d) $7.60, (e) $9, (f) $7.22, (c) $7.16; concrete masonry "C," (a) $6.75, (d) $7.25, (e) $8.50, (f) $6.97, (c) $7.24; concrete masonry "D," (a) $7, (d) $7, (e) $11, (f) $6.97, (c) $7.18.

Brightwood sewer—excavation, (a) 55 cts., (d) 65 cts., (c) 75 cts., (b) 59 cts., (g) 55 cts.; sewer brick masonry, (a) $13, (d) $14, (c) $16, (b) $14.50, (g) $13; 24-in. diameter pipe, (a) $1.10, (d) $1, (c) $1.15, (b) 90 cts., (g) 90 cts.; 18-in. pipe, (a) 80 cts., (d) 80 cts., (c) 85 cts., (b) 79 cts., (g) 80 cts.; 21-in., (a) 90 cts., (d) 90 cts., (c) 95 cts., (b) 90 cts., (g) 90 cts.; 15-in. pipe, (a) 65 cts., (d) 65 cts., (c) 70 cts., (b) 67 cts., (g) 65 cts.; 12-in. pipe, (a) 60 cts., (d) 60 cts., (c) 57 cts., (b) 57 cts., (g) 60 cts.

SPARTA, GA.—The city has voted $40,000 bond issue for sewerage and water-works. John D. Walker, Mayor.

EASTMAN, GA.—The city has voted issuance of $50,000 of bonds for construction of sewerage system and school improvements.

EASTMAN, GA.—See item under Water Supply-Irrigation.

ARMORY, MISS.—The Solomon-Norcross Co., of Atlanta, Ga., is preparing plans for the construction of sewers here to cost about $50,000. J. P. Johnston is Mayor.

NEW ORLEANS, LA.—City will construct drainage system in connection with other improvements at West End. W. J. Hardee, City Engr.

LOUISVILLE, KY.—Contract was let on Aug. 17 for the construction of a sewer in Section A of the Western Interceptor, 3,500 ft. in length, to GUILD & CO. of Chattanooga, Tenn., by the Louisville Sewerage Commission. J. B. F. Breed is Ch. Engr. Comn.

CHARDON, OHIO.—See item under Water Supply-Irrigation.

NEWBURG, OHIO.—See item under Water Supply-Irrigation.

HAMILTON, OHIO.—F. E. Weaver, City Engr., is preparing plans for sewers in Shuler Ave., and in Vine and Butler Sts.

ELYRIA, OHIO.—Bids will be received until Sept. 2 by the Board of Public Service for constructing a sewer in portions of Gulf, Poplar and Hamilton Sts. Rose Moriarty is Clk.

ZANESVILLE, OHIO.—The lowest bid for the construction of a storm sewer in Johnson St., Woodlawn Ave., and Maysville Ave., has been submitted to the city by Geo. W. Adams at $8,707. Other bids were: W. S. Gregg, $10,830; T. M. Lynn, $10,987, J. F. Brown, $11,225, J. W. Hysen, $9,828, Adams Bros. Contracting Co., $9,839.

CLEVELAND, OHIO.—Resolutions have been introduced in the City Council providing for the expenditure of $10,000 for the construction of a branch intercepting sewer, and for $6,500 for the construction of Morgana Ave. sewer, between Independence Road, S. E., and East 49th St.

SPRINGFIELD, OHIO.—Contracts were awarded on Aug. 17 by the Director of Public Service for the construction of sewers as follows: Sewer in Clark St. and Lytus Ave. from the trunk sewer to WILLIAM BOYD of Dayton, Ohio, at $10,002; sewers in portions of Garfield Ave., Young St., Woodlawn Ave., Lincoln Ave., North St., Reynold St., and First St., to JOHN ARPP, JR., at $6,512; sewer in portions of Second St., Monroe Ave., and Sutphin Ave., to FRED KESTING at $6,018.

NOTTINGHAM, OHIO.—Bids will be received at the office of the Clerk until noon, Sept. 24, for the construction of a sanitary sewer in Sackett Ave., from the West Corporation line to a point 1,250 ft. east of Moses Ave. Plans and specifications on file at the office of J. B. Davis & Son, Engrs., 207 The Arcade, Cleveland. J. C. Steinicke is Clk.

YOUNGSTOWN, OHIO.—All bids for the sewering Phelps St., between Boardman St. and Lincoln Ave., have been rejected. New bids will be received until Sept. 6. Frank Lillie is City Engr.

YOUNGSTOWN, OHIO.—Bids will be received by the Director of Public Service until noon, Sept. 2, for the construction of sewers in Quarry St., between Wilson Ave. and city limits. Plans and specifications are on file at the office of the City Engineer. W. H. McMillen, Clk.

*COLUMBUS, IND.—Bids will be received until 7.30 p. m., Sept. 19, for 3,000 ft. of vitrified sewer and laterals. Edwin A. Cobb is City Clk.; Wm. H. Rights, City Engr.

MICHIGAN CITY, IND.—The city has let a contract to W. H. BELL & CO. for the construction of a sewer in Holiday St., at 65 cts. a ft.

CADILLAC, MICH.—R. E. Elsner, City Engr., is preparing plans for a sewage disposal plant for the city. George Johnson is City Clk. Installation is to include two small pumps. Bids are asked until Sept. 10.

FLINT, MICH.—Contracts have been warded by the Common Council to W. N. SAGER at $3,439, for the construction of sewers in Stevenson, Highland and Garland Sts.

CHARLEVOIX, MICH.—Bids will be received until Sept. 10 for the construction of city sewers. C. E. Dutton is City Clk.

GALESBURG, ILL.—Contract was awarded on Aug. 16, by the city for the construction of sewers in Berriem, Indiana and Main Sts., to the OTTAWA CONSTRUCTION CO. at $14,336.

EAST MOLINE, ILL.—Plans and estimates for the construction of a sewer system in the business district between First and 15 Sts., were submitted on Aug. 15, to the City Council by H. G. Paddock, City Engr. Estimated cost, $20,000.

EVANSTON, ILL.—The M. FOLEY CO. has secured a contract for constructing a system of tile pipe sewers in eight streets at $12,245.

ST. CHARLES, ILL.—The construction of the proposed pipe sewer system for the city will cost $90,000. G. M. Lamb, is City Engr.

CHICAGO, ILL.—An agreement has been reached between Geo. Wisner, Chief Engr., and the Board of Local Improvements for constructing a sewer through Gage Park District, whereby the Sanitary District's share of the cost would be $78,000.

ALGOMA, WIS.—Bids will be received until 7 p. m., Sept. 3, for constructing city sewers as follows: 520 ft. 18-in., 306 ft. 15-in., 1,022 ft. 12-in., 940 ft. 10-in., 606 ft. 8-in. sewer pipe; 11 manholes and 23 catchbasins. Plans and specifications are on file in the office of the City Clerk. A. C. Greaves is City Engr., Sturgeon Bay, Wis.

WEST ALLIS, WIS.—New bids will be asked for constructing about 24,000 ft. of city sewers. L. F. Fisher is City Clk.

MILWAUKEE, WIS.—Bids will be received until Sept. 7, by T. B. Olsen, village clerk, for constructing various sewers.

WATERTOWN, WIS.—Bids will be received until Sept. 5, for constructing 974 ft. of 18-in. vitrified pipe sewer, 1,269 ft. 15 in. and 780 ft. 10 in. Arnold Kraft is City Engr.

FORT MADISON, IOWA.—Contract has been let for the construction of 10,000 ft. of sewers to John Downs, Fort Madison. M. E. Barmon is City Engr.

HOWARDEN, IOWA.—Bids will be received by T. J. Reeves, City Clk., until Sept. 3, for 18,400 ft. of 8 to 12-in. vitrified pipe sewers.

GRAND RAPIDS, MINN.—The Village Council has awarded contract for the construction of the lower end of the Leland Ave. sewer to the GRAND RAPIDS IMPROVEMENT CO., of Grand Rapids, at $4,894.

GRAND FORKS, N. DAK.—Bids will be received until Sept. 5 by Charles J. Evanson, City Audr., for constructing a lateral sewer No. 4 in Oak St., Sewer District No. 10.

CANTON, S. DAK.—Contract has been awarded for constructing sewers to MYRMO BROS., of Sioux Falls, at 50 cts. per lin. ft., and $33 for each manhole.

WAGNER, S. DAK.—Contract for furnishing and laying approximately 12,000 lin. ft. of sewer, flush tanks, etc., has been awarded to L. W. SCHRUTH, of Fargo, N. Dak., at about $17,000. H. D. James, is Mayor.

DALLAS, TEX.—Contract was awarded by the Municipal Commissioners to DALLAS LIME & GRAVEL CO. at $3,455 to lay 10-in. sewer from Award St. eastward in Elm St. to Wilson Bldg.

FORT CROCKETT (Galveston, Tex. post-office).—Bids were received on Aug. 22, by Capt. P. Whitmore, Q. M., U. S. A., for the construction of a sewer system. The bids were as follows: General Contract Co., New Orleans, La., $30,900; Isaac Heffron, Galveston, $17,650; Kelso & Vautrin, Galveston, $16,950; Galveston Gas Fitting & Plumbing Co., Galveston, $17,247.

EL PASO, TEX.—The City Council has accepted and approved the plans for sewage and garbage disposal plant to cost $100,000.

GRAND JUNCTION, COLO.—The City Engineer has estimated the cost of constructing sewers in sewer district No. 3 at $35,000.

DENVER, COLO.—Bids will be received until Sept. 12 for the construction of four sanitary sewers. Plans and specifications are on file at the office of Geo. H. Sethman, City Engr., 250 Equitable Bldg. Estimated cost, $18,000.

DENVER, COLO.—Contract has been awarded to the DENNIS GIBBONS CONSTRUCTION CO., at $175,000, for constructing the Washington Park storm sewer. This sewer will be 18 miles in length.

SEATTLE, WASH.—See under Streets and Roads.

KLAMATH FALLS, ORE.—Contracts were awarded on Aug. 12, by the City Council for the construction of the second unit of the sewer system of this city to the CHICO CONSTRUCTION CO. of Chico, Cal., at $12,490. The work includes 7,762 ft. of pipe from six to twelve inches in diameter. The only other bidder was the Ransome Crummey Co., of Oakland, at $13,860.

LOS ANGELES, CAL.—The City Council has passed the following ordinances for the Construction of sewers in Hobart, Harvard and La Salle Aves.: In 54th St., from Western to Normandie and other streets; in Lot B (54 St.) Lawerence Burck's tract, between western and east line of said lot.

LOS ANGELES, CAL.—The following bids have been received for sewer construction and street improvement in alley west of First St.: W. N. Hendricks, $16,700, Peter Gribovach, $17,648; R. U. Nikcevich (bid not totaled). Work consists of reinforced concrete and tile sewer, brick, sewer, vitrified pipe, cement curbs and gutters, grading, graveling and oiling.

COLTON, CAL.—Contract for constructing the new sewer system for the city has been awarded to the WATSON & SPICER CO. of Colorado Springs, Colo., at $52,306. About 22 miles of sewer and storm drain will be installed.

SAN FRANCISCO, CAL.—The Board of Public Works has awarded contract for the construction of sewers and appurtenances in Section C of the Division St. sewer to the HEALY TIBBITS CO., 268 Market St. at $62,244.

BOULDER CREEK, CAL.—Bids will be received by the Town Clerk until 8 p. m., Sept. 7, for constructing storm drain in Lorenzo St. beginning at the southwest corner of Oak and Lorenzo Sts. and thence running westerly along Lorenzo St. to Boulder Creek. James M. Maddock is Clk.

REDWOOD CITY, CAL.—Contract has been awarded by the City Council for the construction of a storm sewer in the county road to C. W. MELVIN at $13,933.

PLEASANTON, CAL.—Contract for the construction of Pleasanton's septic sewer system has been awarded to the SCHMIDT CONSTRUCTION CO., of Berkeley, at $24,502. Other bidders were: Scott & Farley, $24,990; N. P. Gland, $25,693; Russell & Mathieson, $27,720; Federal Construction Co., $27,890; W. Heafey, $27,893; Contra Costa Construction Co., $29,072; Easterly Construction Co., $32,310; Waldie Construction Co., $33,963. P. A. Haviland is City Engr.

RAINY RIVER, ONT.—Bids will be received until Sept. 6, by the town, for constructing the following: (A) Laying 300 ft. of 15-in., 650 ft. 12-in., 650 ft. 10-in., 1,700 ft. 9-in. sewer pipe; 350 ft. flexible joint, iron pipe, and constructing 19 manholes, 2 flush tanks, 6 lamp holes and pump house and installing machinery. (B) laying 3,450 ft. 6-in., 1,100 ft. 8-in. pipe, and 3,300 ft. 9-in. (C) installing disposal plant. J. H. Wilson is Town Clk.

SASKATOON, SASK.—Bids will be received until Sept. 8, by Walter C. Murray, Pres. University of Saskatchewan, for all works in connection with sanitary and storm sewers and sewage disposal works for the buildings and grounds of the University.

GARBAGE DISPOSAL.

ROCHESTER, N. Y.—The Common Council has passed resolution authorizing the erection by the city of a reinforced concrete refuse incinerating plant on Falls St., at an estimated cost of $100,000. F. F. Ellwood is Comr. of Pub. Wks.

EAST LIVERPOOL, OHIO.—Contract for the erection of the new incinerator for this city was awarded on Aug. 17 by the Board of Control to the DE CARIE INCINERATOR CO., West Minneapolis, Minn., at $24,000. The contract for the building which is to house the plant was awarded to the SAND & GRAVEL CO., of this city, at [illegible]18. Noted on Aug. 18.

EL PASO, TEX.—Bids will be received until Sept. 20 for the construction of a complete garbage refuse and [illegible] disposal plant. Estimated cost, $100,000. C. W. Fassett is City Clk.

SAN FRANCISCO, CAL.—Bids will be received by the Board of Public Works until 2 p. m., Nov. 16, for furnishing, installing, testing and delivering two incinerating plants for garbage disposal system. Plans are on file with the Board. Noted on Aug. 8.

STREETS AND ROADS.

(*Denotes that this work is advertised in *Engineering News*.)

FORT McKINLEY (Portland post-office), ME.—Bids were received on Aug. 15, by Capt. Joseph F. Gohn, Constructing Q. M., U. S. A., 655 Congress St., Portland, for the construction of a service road, grading, etc., at Fort McKinley. The lowest bidder was Richard D. Shanahan, Portland, at $3,997.

KITTERY, ME.—Bids for building 7,144 ft. of gravel road in the town of Kittery will be received at the office of the Selectmen until 2 p. m., Sept. 3. J. [illegible] Philbrick is City Officer.

HARTFORD, CONN.—Contracts for state road work, bids for which were received at the office of the State Highway Commissioner on Aug. 8, have been awarded as follows:

Town of Bristol, 2,251 ft. macadam-telford on School St., including one 15-in. tile culvert, to PIERSON ENGINEERING & CONSTRUCTION CO., Bristol, Conn., at 98 cts. per sq. yd. for macadam, $1.40 for telford, and $2.85 for brick work.

Town of North Branford, 15,327 lin. ft. macadam-telford road, including six 12-in., two 18-in., one 24-in., one 15-in. tile culverts and one reinforced I-beam culvert, to A. BRAZOS & SONS, Middletown, Conn., at $1.85 per lin. ft. for macadam, $2.20 for telford, and 80 cts. per lin. ft. for rubble drain.

Town of Durham, 18,237 lin. ft. macadam-telford road, including three 12-in., three 18-in., two 15-in., one 20-in., two 24-in. and one 30-in. tile culverts and two reinforced I-beam culverts, to FRANK ARRIGONI & BRO., Durham, Conn., at $2.27 per lin. ft. for macadam, $2.95 for telford and $1 for rubble drain.

Town of Sherman, 6,785 lin. ft. graded-telford road, including three 18-in., twelve 24-in., one 15-in., and two 20-in. tile culverts, to GOODMAN & TRUMBULL, Litchfield, Conn., at $19,248 for grading and 60 cts. per lin. ft. extra for telford, $1 for rubble drain, and 60 cts. per sq. yd. for cobble gutters.

Town of Bridgewater, 11,835 lin. ft. graded-telford road, including one 12-in., nine 15-in., four 18-in., one 20-in., six 24-in., and three 30-in. tile culverts, to GOODMAN & TRUMBULL, Litchfield, Conn., at $25,240, for grading, and 60 cts. per lin. ft. extra for telford, and $1 for rubble drain.

Town of East Haven, First Section, 3,178 lin. ft. macadam-telford on the Foxen road, including one 18-in. tile culvert, to CHARLES W. TRYON, Meriden, Conn., at $2.20 per lin. ft. for macadam, $2.75 for telford, $1 for rubble drain; Second Section, 7,670 lin. ft. macadam-telford on Thompson Ave., to ROBERT D. DALY, New Haven, Conn., at $1.49 per lin. ft. for macadam, and $2.25 for telford.

Town of North Haven, First Section, 840 lin. ft. macadam-telford, to LAWRENCE BRUCE, North Haven, Conn., $1.59 per lin. ft. for macadam, $2.59 for telford, and $1.55 for rubble drain; Second Section, 727 lin. ft. macadam-telford, same contractor, at $1.97 for macadam, $2.97 for telford, and $1.55 for rubble drain; Third Section, 641 lin. ft. macadam-telford, same contractor, at $1.81 for macadam, $2.81 for telford, and $1.55 for rubble drain.

Town of Woodstock, 8,500 lin. ft. graded-telford road, including one 20-in., one 15-in., one 12-in., and two 24-in. tile culverts, to A. BRAZOS & SONS, Middletown, Conn., at $12.325 for grading, and 40 cts, per lin. ft. extra for telford, and 80 cts. for rubble drain.

WATERBURY, CONN.—Bids for the construction of cement walks and curbings on North Main St., Columbia Boulevard and Watertown Road will be received by the Board of Public Works until 8 p. m., Sept. 13. Benjamin Chatfield is Supt. Paving.

NEW YORK, N. Y.—Bids were received as follows, on Aug. 18, by the Department of Parks, for excavating earth, rock and other material and regulating and grading in John Jay Park between 76th and 78th Sts.: P. J. Kane, 735 East 150th St., New York, $62,320; Charles L. Doran, 1015 Wilton Ave., New York, $70,930; La Mura Contracting Co., New York, $52,890; Patrick Reddy, Lenox Ave., and 111th St., New York, $56,580; Haggerty & Drummond, New York, $67,650; Cooper & Evans, 220 Broadway, New York, $54,120; Thos. Crimmins, 444 East 69th St., New York, $63,243; Conavan Bros., New York, $81,180; Cunningham & Kearns, 438 East 9th St., New York, $53,710.

Bids were received on the same day and place for paving and repaving with rock asphalt mastic where directed the walks of Central and other parks: Barber Asphalt Paving Co., 30 Church St., New York, $30,492; Sicilian Asphalt Paving Co., 41 Park Row, New York, $29,425.

Bids will be received until 2 p. m., Sept. 8, by Kingsley L. Martin, Comn. of Bridges, for laying and relaying water and gas mains and grading and paving streets, adjacent to the Municipal building.

NEW YORK, N. Y.—Bids will be received by the President of the Boro. of the Bronx, until 11 a. m., Sept. 12, for paving with granite block pavement on a concrete foundation the roadway of East 162d St., from Prospect Ave. to Stebbins Ave., and setting curb where necessary; for regulating, grading, setting curbstones, flagging the sidewalks, laying crosswalks, building approaches and placing fences in Wayne Ave., from Reservoir Oval West to Gun Hill road; for regulating, grading, setting curbstones, flagging the sidewalks, laying crosswalks, building approaches and placing fences in Jerome Ave., from 190th St. to a grade point about 600 ft. north af Van Cortlandt Ave.; for constructing sewers and appurtenances in West 242d St., between Broadway and Waldo Ave.; Waldo Ave., between West 242d St. and West 244th St.; in West 244th St., between Waldo Ave. and Spuyten Duyvil Parkway; in Spuyten Duyvil Parkway, between West 244th St. and Riverdale Ave. Cyrus C. Miller is Pres.

NEW YORK, N. Y.—Bids will be received by George Cromwell, Pres. Boro. of Richmond, until noon, Sept. 13, for furnishing the labor and materials required for constructing cement sidewalks, reflagging, etc., on various streets.

Bids will be received by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., Sept. 14, for regulating, grading, curbing and laying sidewalks on various streets in Brooklyn.

UTICA, N. Y.—Bids were received on Aug. 17, by the Board of Contract and Supply and the contracts were awarded to the BARBER ASPHALT PAVING CO., Utica, for paving Elm St. from the West Shore R. R. to Pleasant St. with sheet asphalt and artificial stone curb at $7,447.

SYRACUSE, N. Y.—The following contracts were awarded on Aug. 22, by the Board of Contract and Supply: CENTRAL CITY PAVING CO., 213 Kirk Block, Syracuse, for paving Lincoln Ave. from Midland Ave. to Tallman St., with asphalt at $10,363. The same company will pave Prospect Ave., from Butternut to North Salina St., with asphalt for $4,405. F. J. BAKER, 319 University Block, Syracuse, was awarded the contract for paving Park Ave. from Sackett St. to Lakeview Ave. with asphalt, at $9,148, and Park Ave. from Liberty St. to Sackett St., with asphalt, at $6,982.

ROCHESTER, N. Y.—Bids were received on Aug. 18, by the Board of Contract and Supply for paving with brick and changing the grade of Exchange St. from the Pennsylvania railroad bridge to Magnolia St.

The contract was awarded to WHITMORE, RAUBER & VICINUS, 279 South Ave., Rochester, at $20,740. The same firm will pave Allen St. from Plymouth to Platt Sts., between the car tracks, with Medina block, for $9,828.

BUFFALO, N. Y.—Bids were received as follows by George H. Norton, Acting Comr. of Public Works, on Aug. 20, on the municipal concrete walk contract for the balance of the present year: Gentile & Cervi and the Liberty Paving Co., Buffalo, both bid 9 cts. a sq. ft., and Robert Seibert, Morgan Bldg., Buffalo, bid 9⅔ cts. a sq ft. Estimated cost, $10,000 to $15,000.

NEWARK, N. J.—We are officially advised that bids were reeived by Morris R. Sherrerd, Ch. Engr., Bd. of Street and Water Comrs., on Aug. 25, for 7,900 sq. yds. of paving on Lake and 6,500 sq. yds. on Murray Sts. Contracts have been awarded to the NEWARK PAVING CO., Newark, at $23,186, for the Murray St. work, and to the JERSEY PAVING CORPORATION, Union Bldg., Newark, at $18,437 for the Lake St. paving.

JERSEY CITY, N. J.—It is reported that Bergen Ave. is to be asphalted from Fairmount to Sip Aves., at a cost of $6,000. John W. Griffin of Arlington, N. J., is Consulting Engr., Street and Water Bd.

TRENTON, N. J.—Bids will be received by the Common Council, Sept. 6 for the construction of the following pavements: Rusling St. from Chestnut Ave. to Anderson St., with sheet asphaltum on a concrete base; for widening and paving East State St. in front of the new City Hall with sheet asphaltum, on a concrete base; for the paving of Beatty St., from Broad to Lator Sts., with R. Y. Filbert improved waterproof filbertine on a concrete base; for the construction of a sewer in Tuspin St., from a point midway between Furman and Federal Sts., north to Furman St. to connect with Sewer No. 231, also in Turpin St., south to Federal St., for a sewer in Klagg Ave., between East Trenton and Girard Aves. for a sewer in Ingham Ave. from a point near the right of way of the New Jersey-Pennsylvania Traction Co., to Willow St. Proposals must be accompanied by a certified check. Plans and specifications may be seen at the office of the City Engineer, City Hall, on and after Sept. 2.

NEW CASTLE, DEL.—The CORCORAN CONSTRUCTION CO., of West Chester, Pa., was awarded the contract on Aug. 17, for constructing a new macadamized road, a section of the Lancaster turnpike, from Barker's Bridge, over Red Clay Creek, to Hockessin, in Mill Creek Hundred, at $7,790.

*FORT DU PONT (Delaware City post-office), DEL.—Bids were received by the Constructing Q. M., U. S. A., Fort Dupont on Aug. 25, for the construction of an oyster shell road from Harrisonville, N. J., to Fort Mott, N. J. The lowest bidder was H. C. Clark, Delaware City, at 86¾ cts. per sq. yd.

BALTIMORE, MD.—P. F. REDDINGTON, 321 St. Paul St., Baltimore, has been awarded contract by the Board of Awards, J. Barry Mahool, Pres., for paving Park Terrace, near Robert St., with vitrified paving brick.

The MONROE PAVING CO., Philadelphia, Pa., has been awarded contract for paving Liberty Road, between Walbrook Junction and the city limits, by the State Roads Commission.

BALTIMORE, MD.—The F. E. SCHNEIDER PAVING CO., Law Bldg., is the lowest bidder on grading, curb and paving with sheet asphalt or asphalt block, or bitulithic, Park Terrace, from Park Ave. to Robert St. Bids were opened on Aug. 17. B. T. Fendall is City Engr.

*ANNAPOLIS, MD.—We are officially advised that bids were received by the City Clerk on Aug. 24 for paving West St. with vitrified brick (about 3,050 sq. yds.) The contract was awarded to WILLIAM E. FELDMEYER, at the following prices: Excavation, 42 cts.; granite curb, 75 cts. per lin. ft.; resetting curb, 15 cts. per lin. ft.; vitrified brick paving, $1,86½ per sq. yd. Total, $6,466. J. C. Little is City Engr., and P. E. Porter, City Clk.

*WASHINGTON, D. C.—Bids were received by the District Commissioners on Aug. 15, for grading certain streets in the district, about 68,000 cu. yds. The contract has been awarded to E. J. GUMMELL, Washington, as follows: Item (1) 39 cts. per cu. yd.; item (2), 27 cts. per lin ft.; item (3) 37 cts. per lin ft.; item (4) 37 cts. per sq. ft.; item (5) 59 cts. per sq. yd.

JACKSONVILLE, FLA.—It is announced that the official route for the Atlanta-Jacksonville Highway will be selected about Oct. 1. W. M. Bostwick, Jr., is Supt. of Paving. G. D. Ackerly is City Clk.

ATTALLA, ALA.—We are officially advised that the town will receive bids on about 600 sq. yds. of sidewalk paving and 800 lin. ft. of combination curb and gutter until 8 p. m., Sept. 5. Wilburn Hill, Gadsden, Ala., is Engr.

MONTGOMERY, ALA.—All bids for building the extension of Fairview Ave. to the Woman's College, which were recently received, have been rejected as excessive. It has been decided by the Board of Revenue that the work shall be done by J. T. Bullen, County Engr. W. A. Sherley will have charge of the work which is to be begun at once.

Bids will be received by the City Treasurer until noon, Sept. 19, for paving the roadway of Madison Ave. from the west side of Bainbridge St., to the city limits, with brick, asphalt, bitulithic, Blome granitoid block, etc. Plans and specifications are on file in the office of the City Engineer. Robert Tait is City Treas.

BIRMINGHAM, ALA.—Bids will be received until Sept. 1, by the Jefferson County Board of Revenue, for road construction and improvements. Estimated cost about $25,000. Maury Nicholson is City Engr.

CHATTANOOGA, TENN.—The City Council has authorized the issuance of $100,000 of paving bonds. J. M. Payne is City Clk.

*PADUCAH, KY.—We are officially advised that all bids received on Aug. 23, by the city for constructing sidewalks, etc., have been rejected. New bids are asked until 3.30 p. m., Sept. 5. L. A. Washington is City Engr. For details see advertisement in this issue.

LEXINGTON, KY.—An ordinance was passed by the General Council on Aug. 18, providing for the reconstruction of Vine and North Limestone Sts. James T. McCarty is Acting Mayor and J. E. Cassidy, is City Clerk.

AKRON, OHIO.—Resolutions have been adopted by the City Council for the improvement of Main St. and plans and specifications for the work have been prepared by the State Highway Commissioner. The specifications call for 1½ miles of brick paving, 14 ft. wide, to extend from the city limits to Schwartz's Corners. Estimated cost, $25,000.

CADIZ, OHIO.—Bids were opened by the County Commissioners on Aug. 25, for the improvement of the Piedmont Road in Harrison County, from the plans of the State Highway Department as follows: Moore & Stahl, St. Clairsville, $15,000; J. P. WARNICK, Cadiz, $14,847 (awarded contract).

COLUMBUS, OHIO.—Bids were opened on Aug. 24, by the Director of Public Safety of Columbus, for the paving of subways under railway structures. For Contract No. 7, for paving subways under the Baltimore and Ohio R. R. crossings, the bids were: D. E. Sullivan & Son, Athens, or Portsmouth block with cement filler, $47,143; tar filler, $47,313; asphalt filler, $48,248. W. H. Lutchenberg & Co., Athens, Nelsonville or Trimble block with cement or tar filler, $56,530; asphalt filler, $58,004; Contract No. 8, for paving the subways under crossings of the P. C. C. & St. L. R. R., Geigle, Garnes & Co., Columbus, Athens, Portsmouth or Trimble block with cement or tar filler, $7,453; asphalt filler, $7,779; H. J. Shaw, Columbus, Athens or Nelsonville block with tar filler, $7,799; asphalt filler, $7,962; William H. Lutchenberg & Co., Athens, Nelsonville or Trimble block, tar or cement filler, $8,706; asphalt filler, $9,032.

COLUMBUS, OHIO.—JOHN M. SNOUFFER of Columbus, has been awarded contract for the improvement of the Hilliard and Dublin road, a distance of 12½ miles, by the County Commissioners, at $25,221.

Bids will be received at the office of the County Commissioners of Franklin County until Sept. 12, for the necessary labor and materials to construct the first layer of the Jackson Pike from Greenlawn Ave. to the Frank road, east, a distance of 8,342 ft. It is estimated that 2,780 tons of crushed stone will be required for the work. John Scott is Clk. Bd. of County Comrs.

COLUMBUS, OHIO.—The Board of County Commissioners on Aug. 23 opened bids for the improvement of the Portsmouth and Columbus Road as follows: KAPS BROS., Portsmouth, brick with cement grout filler, $8,726; brick with sand filler, $8,538; brick with asphalt cement filler, $8,632 (awarded contract); J. A. Grimes, Portsmouth, brick with cement grout filler, $8,884; brick with sand filler, $8,300; brick with asphaltic cement filler, $8,884; S. Monroe & Sons, Portsmouth, brick with cement filler, $9,500; brick with sand filler, $8,850; brick with asphaltic cement filler, $9,500; Kelly Bros., Portsmouth, brick with cement grout filler, $9,500; brick with sand filler, $9,300. The work will be done under the supervision of the State Highway Department. J. C. Wonders, Columbus, is State Highway Comr.

Bids will be received by the Commissioners of Mahoning County, Ohio, until noon, Sept. 2, for grading and macadamising and paving with brick 1.25 miles of road in Springfield Township, said county, under the provisions of the state highway law. Specifications, plans and profiles are on file in the office of the County Commissioners in Youngstown, Ohio, and at the State Highway Department. Estimated cost, $14,822.

NEWARK, OHIO.—Bids will be received by the Commissioners of Licking County until noon, Sept. 7, for grading and macadamizing one mile of road in Newark Township. Specifications, plans and profiles are on file in the office of the County Commissioners in Newark, Ohio, and at the State Highway Department. Estimated cost, $4,597.

DELAWARE, OHIO.—Bids will be received at the office of the County Commissioners of Delaware County until Sept. 10, for the improvement of the Simsbury Pike in Berlin and Berkshire Townships, extending from the old railroad bed to Sunbury, from the plans and specifications, by the State Highway Commissioner. W. F. Whittier is County Surv.

WAPAKENETA, OHIO.—Bids will be received by the City Clerk until Sept. 16, for the necessary labor and materials for paving Auglaize St. from the Cincinnati, Hamilton & Dayton Ry. tracks to Main St. Fred A. Klipfel is City Clk.

CLEVELAND, OHIO.—We are officially advised that no bids were received on Aug. 24, for the repairs of Detroit road (pavement), in accordance with the form of contract and specifications furnished by Frank R. Lander, County Surv.

Bond issues were authorized recently to the amount of $100,000 for paying the city's portion of paving about 37 streets, and $188,000 for paying the city's portion of sewering about 20 streets.

CLEVELAND, OHIO.—Bids will be received by the Board of County Commissioners of Cuyahoga County, until 11 a. m., Sept. 10th, for furnishing material for the repair of Lorain Road on Rocky River bridge approach and at Kamms Corners, Rockport. John F. Goldenbogen is Clk. Bd.

TOLEDO, OHIO.—The County Commissioners have awarded the contract for the improvement of the Keener Road in Waterville Township to C. W. Ryan, of Toledo. The engineer's estimate is $21,260.

CINCINNATI, OHIO.—Twelve bids have been received for the paving, with granite, Harrison Av., from Fischer's west line to the corporation line. Thomas Evans, Cincinnati, submitted the lowest bid. Estimated cost, $100,000.

HAMILTON, OHIO.—The Board of County Commissioners have approved the plans of the Ohio State Board of Public Works, for macadamizing two miles of the Columbia Bridge Road, leading to Venice. The estimated cost is $12,000. H. B. Grevey is City Clk.

YOUNGSTOWN, OHIO.—The contract for paving Caroline St. has been awarded by the Board of Control to SURNER & OLSEN at $5,072.

DEFIANCE, OHIO.—Bids were received by the County Commissioners of Defiance, on Aug. 25, under the State Highway Law, for constructing State Highway C, Petition No. 260, Holgate, as follows: Schneider Bros., Defiance, $5,929; CHARLES SHINDLER and W. E. DAVIS, Defiance, $5,840 (awarded contract). James C. Wonders is State Highway Comr., Columbus.

BRYAN, OHIO.—Bids were received on Aug. 24, by the State Highway Commissioner and the County Commissioners in Bryan, for constructing Section No. 2, State Highway C, Petition No. 143, Jefferson Township Road, as follows: G. W. Farison, Archbold, Ohio, waterbound and 1,000 ft. with acceptable tar or asphalt treatment, $11,050; The OHIO PAVING CO., Toledo, Ohio, waterbound and 1,000 ft. with carbovia or tarvia, $10,999 (awarded contract); The Ohio Paving Co., Toledo, 1,000 ft. with Keystone Refining Co. asphalt binder, $10,949; The Ohio Paving Co., Toledo, 1,000 ft. with Taroid, $10,949. James C. Wonders is State Highway Comr.

MILLERSBURG, OHIO.—Bids were received on Aug. 18, by the State Highway Commission and the County Commissioners in Millersburg, for constructing State Highway C, in Holmes County, Petition No. 265, Millersburg and Berlin Road, as follows: SPENCE BROS., Cleveland, at $8,300 (awarded contract); Lee & Griggs, Millersburg, $9,279. James C. Wonders is State Highway Comr., at Columbus.

CADIZ, OHIO.—Bids were received on Aug. 25 by the State Highway Commisioner in Cadiz, for constructing in Harrison County, State Highway D, Petition No. 258 Piedmont Road as follows: Moore & Strahl, Claisville, Ohio, $15,000; J. P. WARNICK, Cadiz, $14,847 (awarded contract). James C. Wonders is State Highway Comr., Columbus.

HUNTINGTON, IND.—It is stated that the contract for the construction of a concrete sidewalk on the east side of Washington St., between Fifth and Jefferson Sts., and for a concrete sewer in the big ditch just south of the Southern depot, was awarded recently to J. M. COFFEE, Huntingburg, at the following prices: Sewer, $7 per cu. yd.; sidewalk, 12 cts. per sq. ft.; curbing and gutter, 60 cts. per cu. yd. There were three other bids as follows: Sullivan Cement Stone Co., of Sullivan, Ind., sidewalk, 12½ cts. per sq. ft.; curbing and gutter, 64 cts. per lin. ft. Traylor & Krempp, of Jasper, sidewalk, 12½ cts. per sq. ft.; sewer, $8.50 per cu. yd.; curbing and gutter, 53 cts. per lin. ft., and the Warrick Contracting Co., sidewalk, 11¾ cts. per sq. ft.; curbing and gutter, 52 cts. per lin. ft.

HAMMOND, IND.—The Board of Public Works rejected bids for Section B, May St. paving. New bids will be received until Sept. 9.

MICHIGAN, IND.—The Porter County Commissioners on Aug. 16, awarded the contract to ACKERMAN & CO., of Laporte, for the construction of the three pieces of gravel road three miles in length and connecting up with other gravel roads in Center township, at $11,000.

LOGANSPORT, IND.—According to reports the Board of Public Works at a recent meeting rejected all the bids on the Fifth St. pavement, and it is expected that new bids will be asked for soon. William Pickett is City Clk.

MUNCIE, IND.—Bids for the paving of Wysor St., Muncie, and the construction of a cement curb and gutter along its length will be received by Delaware County Commissioners until Sept. 17. Specifications may be obtained of Joseph E. Davis, County Audr.

The Delaware County Commissioners will consider bids shortly for the construction of a gravel road about a mile and a half long in Harrison Township. Petitions have been filed for the construction of another gravel road about two miles long in the same township.

GARY, IND.—Contract for improvement of Tyler St., has been awarded to the GARY CONSTRUCTION CO. The same company was lowest bidder at $13,043 on Pierce St. improvement. No action was taken on the bids for this work.

DETROIT, MICH.—The Common Council has recommended the paving of Waterloo St. from Mt. Elliott to Bellevue Aves., with wood block. Estimated cost, $8,012; also for the construction of 20-ft. alley, from Cass Ave. to First St. with brick. Estimated cost, $1,665. All on concrete foundation with Medina, Berea or other approved curbing.

CARMI, ILL.—F. R. ROEMER of Belleville, Ill., and HARRY McKAY of Mount Vernon, Ind., have been awarded a contract by the City Council for the installation of 20,000 ft. of granitoid walks here.

SPRINGFIELD, ILL.—Residents of Champaign, De Witt, Piatt and McLean Counties have proposed the construction of a model country road between Champaign and Bloomington, and have asked for state aid. The Chamber of Commerce at Champaign, is pushing the project. A. N. Johnson is Engr. of the State Highway Comn. at Springfield.

MOLINE, ILL.—It is announced that the widening of Fifth Ave., between 13th and 23rd Sts., is to start as soon as arrangements can be made, according to the report issued recently by the Mayor. Bids will be received this fall. Clark G. Anderson is City Engr.

Bids will be asked soon by the city for 70 blocks of cement walks in various parts of the city. H. M. Oldipest is City Clk.

KEWANEE, ILL.—The City Clerk will receive bids until 8 p. m., Sept. 6, for the construction of a macadam walk, bridge and fountain base to be constructed in the West Park in Kewanee. Plans and specifications are on file in the office of the City Engineer. O. D. Peterson is City Clk.

ATLANTA, IOWA.—The city will receive bids until Sept. 8 for three miles of asphaltic concrete paving and six miles of cement curb, etc. S. E. Nichols is City Clk. and Charles P. Chase, of the Iowa Engineering Co., is Engr.

DAVENPORT, IOWA.—Bids are asked by A. M. Compton, Chn. Bd. Pub. Wks., and City Engr., until Sept. 6, for curbing, paving, etc., Second St., from the east line of Western Ave. to the east line of Warren St., including intersections, being about 1,220 lin. ft.

COLERAINE, MINN.—It is reported that Hanson & Nelson, of this city, have submitted the lowest bid for the construction of new concrete sidewalks, curb and gutters for five blocks on Cole Ave. Their bid was 9 4-9 cts. per sq. ft., or 85 cts. a sq. yd. for the walk, and 52 cts. for the curb and gutter.

FORT RILEY, KAN.—The contract for the construction of walks and roads for new building and for paving brick for the construction of walks across the artillery parade at Fort Riley, has been awarded to A. WAGNER, of Junction City, Kan., at $4,736, and to HENRY SCHAUMBURG, Junction City, at $5,000.

ST. LOUIS, MO.—The following street paving contracts were let by the Board of Public Improvements on Aug. 16: Brick—Victoria St., from Billon to Tamm, HIRAM LLOYD BUILDING & CONSTRUCTION CO., Odd Fellows, Bldg., St. Louis, $13,685; Juniata, Ohio to Gravois, same company, $19,526; Alabama, Fillmore to Bates, same company, $9,724; St. Louis, Union to Belt, same company, $10,755; Arsenal, King's Highway to Woods, WEBB-KUNZE CONSTRUCTION CO., Fullerton Bldg., St. Louis, $37,184; Minnesota, Meramec to Gasconade, RUECKING CONSTRUCTION CO., $8,363; Lemp, Utah to Wyoming, same company, $6,168; Alaska, Itaska to Osceola, $15,778; 21st, Bremen to Penrose, DANIEL MURPHY, $12,769; 21st, Branch to Salisbury, same company, $10,359; Bulwer, Grand to Prairie, same company, $10,456; Malden Lane, 25th to Jefferson, same company, $5,198; McRee, Spring to Tower Grove, FRUIN-BAMBRICK CONSTRUCTION CO., Chemical Bldg., St. Louis, $37,186; Duncan, Boyle to Newstead, same company, $8,965; Compton, Winnebago to Miami, G. EYERMAN & BRO., $5,905; Idaho, Bates to Itaska, same company, $27,233; Minnesota, Osage to Keokuk, same company, $6,706; Natural Bridge Road, Grand to Spring, FRUIN-COLNON CONSTRUCTION CO., $27,413; Greer, Union to 440 ft. west, BAMBRICK BROS. CONSTRUCTION CO., $4,244; Glasgow, Cass to St. Louis, HARRY F. HEMAN, $17,953; 20th, Washington to O'Fallon, JAMES E. PERKINSON, $24,890; same street, O'Fallon to Cass, WILLIAM H. REDEMEYER, $9,059; same street, Branch to Salisbury, same company, $11,259; same street, Cass to Branch, SKRAINKA CONSTRUCTION CO., $32,256.

Macadam—Arsenal, Morgan Ford to Kings Highway, GRANITE-BITUMINOUS PAVING CO., Equitable Bldg., St. Louis, $25,296; Portis, Scanlan to Arsenal, same company, $9,512; Bent, Humphrey to Hartford, same company, $13,505; Semple, North Market to St. Louis, same company, $21,272; Union, St. Louis to Natural Bridge road, same company, $27,651.

Telford—Waldemar, Forest Park to McCausland, WEBB-KUNZE CONSTRUCTION CO., $3,773.

Wood blocks—McPherson, Kings Highway to Union, G. EYERMAN & BRO., $27,466; Twelfth, Franklin to Tyler, G. EYERMAN & BRO., $25,438; Twelfth, Tyler to Hebert, GRANITE-BITUMINOUS PAVING CO., $31,168.

OKLAHOMA CITY, OKLA.—It is stated that grading contracts for three miles of work on the Oklahoma City park boulevard were awarded on Aug. 22 by the Park Board. The total amount to be paid the graders is $8,771. For one mile to the north of the city E. T. Bryant was low bidder at $7,800. The estimated cost of the boulevard is $64,070.

YAKIMA, WASH.—The Board of County Commissioners will receive bids until 2 p. m., Sept. 6, for grading and macadamizing with crushed rock, the Fruitvale road, commencing at the east side of Miles Ave. and running thence west along the car line one mile.

SEATTLE, WASH.—Bids will be received by the Board of Public Works until 10 a. m., Sept. 16, for the improvement of several streets by paving and constructing sewers. C. B. Bagley is Secy. Bd.

SEATTLE, WASH.—The following contracts for street improvements have been awarded by the Board of Public Works: 37th Ave. North, and other streets, sewers, to NELSON & CARLSON, at $17,724; 34th Ave. South, and other streets, sewers, to INTERNATIONAL DREDGING CO., at $41,082; North and West 76th St., and other streets, grading, to W. F. MANNEY & CO., at $24,615; 18th Ave. East, and other streets, grading, to GEORGE HANSON, at $22,225. 28th Ave. West, and other streets, grading, to JOHN KALBERG, at $44,916; 9th Ave., and other streets, regrading, to P. J. McHUGH, Third and Mercer Sts., Seattle, at $48,008; North 80th St., and other streets, grading, to W. F. MANNEY & CO., at $25,982; North 82d St., and other streets, grading, to J. H. CULLEN & CO., at $18,960; 9th Ave., and other streets, grading, to P. J. McHUGH, at $11,962; Jackson St., and other streets, cluster lights, generators and underground work, to AGUTTER GRISWOLS CO., at $34,947; ornamental poles, to OLYMPIC FOUNDRY CO., at $6,758.

LOS ANGELES, CAL.—See item under Sewerage.

LOS ANGELES, CAL.—A. C. STANARD, 117 East 21st St., has been awarded the contract by Joseph A. Hurley, Engr., for grading, constructing curbs and sidewalks, oiling and rolling Hartwick St., Eagle Rock Valley, for C. M. Myers, owner, at 20 cts. per cu. yd., for excavating, grading and removing earth, stone, etc.; 24 cts. per lin. ft. for curbs; 8 cts. per sq. ft. for sidewalks; 1½ cts. per sq. ft. for oiling, trimmings, sanding and rolling.

The HIGHWAY CONSTRUCTION CO. has been awarded the contract, at $21,577, for improving, with oil macadam paving, H St., and for improving Court St., at $4,697.

PASADENA, CAL.—Bids will be asked at once for the improvement of California St., from Grand Ave. to Throop Ave. The City Engineer's estimate is $75,000. J. S. Van Orman is City Engr.

OAKLAND, CAL.—Bids are asked by the Board of Public Works until 10 a. m., Sept. 7, for furnishing the necessary labor and materials for improving the north side of 12th St., between Fallon St. and Lake Shore Boulevard, for the Street Department. Frank R. Thompson is Clk. City Council; Walter B. Fawcett is Secy. Bd.

ELKO, NEV.—We are officially advised that bids were received and contract awarded by A. G. Dawley, County Clk., on Aug. 15, for constructing three wagon roads and three bridges to GEORGE PARKINSON, of Charleston, Nev.

MOOSE JAW, SASK.—R. L. FROST, Moose Jaw, has received the contract for laying of 63,000 sq. ft. of concrete walks and 9,000 lin. ft. of combined curb and gutter, and 6,000 sq. ft. of concrete crossings, at $15,330. Other bidders were: W. E. Ransom, Moose Jaw, $16,072; and the Western Pavers, Limited, Winnipeg, $16,417. The contract for six miles wooden sidewalk was awarded to CONTRACTOR ROSS, Moose Jaw, at 29 cts. per lin. ft. Other prices submitted were: Walker Bros., 29½ cts.; McLeod, 33½ cts., and Fenwick, 33 cts. per lin. ft. J. M. Wilson is City Engr.

HIGH RIVER, ALTA.—McKIBBON BROS., Calgary, have been awarded contract for the construction of 3,000 sq. yds. of cement sidewalk at 9⅜ cts. a sq. ft. for walks, 10¼ cts. a sq. ft. for crossings.

MANUFACTURING PLANTS.

(*Denotes that this work is advertised in Engineering News.)

NEW BRITAIN, CONN.—It is reported that Landers, Frary & Clark will build a 7-story addition to their plant this fall.

BUFFALO, N. Y.—We are officially advised that the Directors of the Lackawanna Steel Co., 2 Rector St., New York, on Aug. 25, authorized the expenditure of about $800,000 for the immediate construction of an additional merchant mill at Buffalo. It is estimated that the new mill will be ready for operation about July 1, 1911.

A. S. Alschuler, Arch., Steger Bldg., Chicago, Ill., has let the general contract to STRESSENREUTER BROS., 138 Washington St., Chicago, for a 4-story factory, 60 × 225 ft., at 37th and Loomis Sts., for the Cyphers Incubator Co., of Buffalo.

BUFFALO, N. Y.—The Buffalo Tool & Supply Co., Charles Hood, Mgr., 30 Chapin Block, is having plans prepared for a 1-story steel frame and glass warehouse and repair shop, 75 × 350 ft., on a 2-acre site, recently acquired.

J. R. White, Arch., Arcade Bldg., Niagara Falls, N. Y., has completed plans for a 3-story and basement factory building, 70 × 130 ft., of brick and mill construction, to be erected at Sycamore and Mortimer Sts., by I. J. Lande, 507 Washington St., for the Cooper Paper Box Co., lessee.

NIAGARA FALLS, N. Y.—Robt. C. Fayfield, Arch., 885 Ellicott Sq., Buffalo, is preparing plans for a grinding plant building, 30 × 30 ft., 3 stories, of brick, and alterations to offic ebuilding, 40 × 103 ft., 2 stories, of brick.

AUBURN, N. Y.—The International Harvester Co. is having plans prepared for a 450 × 500-ft., 1-story addition to its Osborne Works on North St. and the New York Central R. R., to be used as a malleable iron foundry and blacksmith shop. It will be of brick, steel and concrete canstruction. Estimated cost, $150,000.

NEW YORK, N. Y.—Zachary T. Davis, Arch., 17 Van Buren St., Chicago, Ill., is preparing plans for a 4-story building, 100 × 125 ft., in Brooklyn, for the Leysar Green Co. It will be of brick and mill construction, with sprinkler system, two electric elevators and a 250-HP. steam electric power plant.

CARLISLE, PA.—R. R. Todd, Carlisle, is planning to erect a carpet factory at the corner of Willow and Pitt Sts., it is stated.

GREENVILLE, PA.—It is announced that arrangements have been made and plans are being prepared for the construction of a factory at Greenville, for the Pittsburg Dry Goods Co., W. H. Neely is Vice-Pres. and Gen. Mgr., 935 Penn Ave., Pittsburg.

Plans are being prepared for a factory in Greenville for the Borden Condensed Milk Co., according to reports.

FRANKFORD, PA.—A 3-story factory of reinforced concrete is to be built for Hiram E. Perry, Propr. of the Edgewater Print Works and the Keystone Finishing Works, both at 1602 Van Dyke St., Philadelphia. The cost is estimated at about $90,000. The Edgewater Print Works and the Keystone Finishing Works will occupy the building as soon as it is completed.

ERIE, PA.—CONSTABLE BROS., Erie, are the contractors for the car barn work in Erie for the Buffalo & Lake Erie Traction Co., M. C. Brush, is Gen. Mgr., at Buffalo, N. Y. Cost, $18,000.

PHILADELPHIA, PA.—It is reported that the CHARLES McCAUL CO., Tenth and Sansom Sts., Philadelphia, will build a 2-story foundry for the Disston Saw Works, to cost $60,000.

HERMAN VOIGT, 1251 North 28th St., Philadelphia, has been awarded the contract, it is stated, for the erection of a 5-story warehouse, 50 × 100 ft., on Paschall Ave., west of 56th St., for the Philadelphia Screen Mfg. Co., to cost $16,000.

BALTIMORE, MD.—The Monumental Brewing Co., 3900 East Lombard St., will erect a bottling plant, 400 × 100 ft., on Baltimore St., between Fifth and Seventh Sts. It will be constructed of brick and four stories high. Electric lights, elevators and a heating plant will be installed. Cost, $70,000.

BALTIMORE, MD.—The National Enameling & Stamping Co., Light and Wells Sts., Baltimore, will erect an addition to their plant soon, it is stated.

MEMPHIS, TENN.—The Liquid Carbonic Co., 67 Wells St., Chicago, Ill., will establish a plant in Memphis to cost about $400,000. James S. Warren, of the Business Men's Club, Memphis, may be addressed.

GALLION, OHIO.—Plans and specifications have been completed by Vernon Redding, Arch., of Mansfield, for a plant to be erected by the Howard Auto Car Co. at Gallion. The plans provide for three buildings and a power-house.

ELKHART, IND.—The Lake Shore & Michigan Southern Ry. Co. is planning the construction of seven shop buildings here to cover nearly 40 acres. E. A. Sheed is Asst. Div. Supt., at Elkhart.

DETROIT, MICH.—Louis Kamper, Arch., Fine Arts Bldg., is preparing plans for a 3-story automobile factory, 900 × 64 ft., at Jefferson and Bellevue Aves. The owners will purchase materials and let contracts. The building will be of cement, concrete blocks, mill construction, with a composition roof, and electric fixtures. Estimated cost, $50,000.

Varney, Winter & Varney, Archs., Equity Bldg., Detroit, will take figures soon on a brass manufacturing plant for the McRae & Roberts Co., Campbell Ave. and Railroad. The main building is to be three stories, of steel and mill construction, 60 × 191 ft. The foundry, 60 × 139 ft., and the boiler-house, 37 × 60 ft. Estimated cost, $50,000.

Mildner & Eisen, Archs., Hammond Bldg., Detroit, let the following contracts on Aug. 8, for the new bottling works, 2-story and basement, 60 × 80 ft., for the Champion Brewing Co., 400 Wilkins St.: Masonry, to WILLIAM REICH & SON, 42 Pulford Ave.; plastering, to H. SCHAEFER & SON, 118 Macomb St., and painting, to WILLIAM ZEMMIN & SON, 390 Gratiot Ave. Cost, $18,000.

DETROIT, MICH.—Albert Kahn and E. Wilby, Trussed Concrete Bldg., let the general contract on Aug. 11 for the 4-story and basement factory building for the Burroughs Adding Machine Co., Alvan McCauley, Gen. Mgr., Second and Amsterdam Aves., to the STERLING ENGINEERING & CONSTRUCTION CO., Caswell Block, Milwaukee, Wis., at $75,000.

The Walter Motor Car Co., has been incorporated with a capital of $150,000, and as soon as a location is decided upon, will build a factory plant. C. M. Walker, Chamber of Commerce Bldg., is Pres.

John Scott & Co., Ford Bldg., have let the following contracts for a 2-story addition to the Standard Foundry Co. plant, S. H. Morris, Gen. Mgr., 24 Chene St.: Structural iron, general construction, to WHITEHEAD & KALES, Beecher Ave., and Michigan Central Railroad; masonry, to A. A. ALBRECHT CO., Penobscot Bldg.; carpentry, to C. J. KELLER & CO., 657 Canfield Ave. East; composition roofing, to PUDRITH & CAUDLER.

Louis Kamper, Arch., Fine Arts Bldg., is preparing plans for a 1-story bottling works, 70 × 75 ft., for the Philip Kling Brewing Co., K. Kling, Secy., 1424 Jefferson Ave. The building is to be of stock brick, bedford stone, reinforced concrete, with composition roof, galvanized iron skylight and cornice, structural iron, concrete floors and electric fixtures.

MUSKEGON, MICH.—M. J. Morehouse, Arch., 279 Dearborn St., Chicago, Ill., has completed plans for a building, one story, 100 × 142 ft., of brick and mill construction, at Muskegon, for the Wright, Coales & Hood Co., manufacturers of automobile parts.

GALVA, ILL.—Raeder & Wood, Engrs., 204 Dearborn St., Chicago, are receiving estimates for a shop, foundry and warehouse at Galva, for the Hayes Pulp & Plaster Co., of brick and steel construction, it is reported.

DECATUR, ILL.—The A. E. Staley Starch Mfg. Co. of Decatur, Ill. has awarded contracts totaling $75,000 to the CHARLES W. GINDELE CO., 3333 La Salle St., Chicago, for the erection of new buildings. Electrical machinery contracts to the extent of $25,000 will be let shortly and contracts for other machinery to be used in starch making will amount to $100,000. The plant will be ready for operation early next year.

CHICAGO, ILL.—Marshall & Fox, Archs., 164 Dearborn St., are receiving estimates on a 2-story concrete building, 70 × 600 ft., for Spaulding & Merrick, 271 Michigan Ave., Chicago. It will have fireproof windows, steam heating and electric elevators.

CHICAGO HEIGHTS, ILL.—The George Limbert Co., 49 Fulton St., Chicago, will erect a foundry and furnace shop at Chicago Heights, of brick and concrete construction.

BELOIT, WIS.—According to reports, Nimmons & Fellows, Archs., Peoples' Gas Bldg., are preparing plans for a 3-story building, 55 × 120 ft., to cost $60,000, at Beloit, for the Berlin Machinery Works. It will be of steel and tile, fireproof construction, with tile roof, electric passenger elevator, and steam heating.

MILWAUKEE, WIS.—The Holeproof Hosiery Co., 57 Fourth St., will erect a 6-story addition, 60 × 80 ft., to its plant at Fourth and Clybourn Sts. Cost, $18,000.

The Milwaukee Structural Steel Co. will erect a factory building, 60 × 120 ft., at 19th St. and St. Paul Ave.

DULUTH, MINN.—C. H. Johnston, Arch., Capital Bank Bldg., St. Paul, awarded the contract to the GEORGE J. GRANT CONSTRUCTION CO., St. Paul, for the construction of a pressed brick and cut stone factory for the Dakota Garment & Mfg. Co., of Duluth. It will be three stories and will be built on Sibley St., near Sixth St. Cost, $45,000.

*EL PASO, TEX.—Bids will be received by the El Paso & Southwestern R. R. Co., of Texas, until Oct. 1, for enlarging the freight house at El Paso. H. J. Simmons is Gen. Mgr.

SAN BERNARDINO, CAL.—The Davis Standard Baking Co. will erect a 3-story brick bakery building at 532 South Beaudry St.

LOS ANGELES, CAL.—It is announced that plans are now being drawn by the Pittsburg Foundry Co., 2418 Santa Fe Ave., for a factory building to be ereceted on North Main St. It will be 40 × 70 ft., and of heavy mill construction with a corrugated iron roof. New machinery will be installed. H. E. Colby is Mgr.

PORPHYRY (Corona post-office), CAL.—The Phillips Contracting Co., of San Bernardino, will erect a rock-crushing plant, at Porphyry. Kirk Phillips is Mgr.

HAMILTON, ONT.—The Hamilton Bridge Works has purchased eleven acres in the east end and will erect a plant here.

PETERSBORO, ONT.—Bids are asked by the Canadian General Electric Co., 212 King St. West, Toronto, Frederic Nicholls, Second Vice-Pres. and Gen. Mgr., until Sept. 6, for extensions to the company's machine shop at Peterboro.

WALKERVILLE, ONT.—Donaldson & Meier, Penobscot Bldg., Detroit, Mich., have let the following contracts for the factory addition to the plant of Parke Davis Co., at Walkerville: Structural iron work, to the RUSSELL WHEEL & FOUNDRY CO., Joseph Campeau Ave. and Michigan Central Railroad, Detroit; masonry, to THOMPSON BROS., Windsor, Ont.; carpentry, to V. WILLIAMSON, Windsor, Ont., and painting, to WHIPPLE & BURNETT, Walkerville.

WELLAND, ONT.—Deere & Co., of Moline, Ill., manufacturers of farming machinery, have secured a site for their Canadian plant on the east side of the Welland Canal with Michigan Central and Grand Trunk railroad connections. Plans are in preparation for the plant, which will cost approximately $1,000,000.

The United Motors Co., Ltd., recently incorporated, with a capitalization of $200,000, will build a plant for the manufacture of motor cars on a five-acre site, at the crossing of the Michigan Central and Grand Trunk railways. Frederick Sager, of Detroit, Mich., is Pres. and Willis L. Adams, Niagara Falls, N. Y.; L. C. Raymond and B. J. McCormick, Welland, and E. A. English, Toronto, are the Directors.

The Chipman-Holton Knitting Co., Welland, will build a factory for the manufacture of hosiery at Queen St. and the Grand Trunk Ry.

COBOURG, ONT.—The Town Council has entered into an agreement with the International Tool Steel Co., of Toronto, for the establishment of the industry here. Work is to be commenced on the plant within 90 days. The company will manufacture tool steel.

MISCELLANEOUS CONTRACTS.

(*Denotes that this work is advertised in Engineering News.)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects will be found under Water Supply—Irrigation.

PIPE, ETC.—Washington, D. C.—Bids are asked until Sept. 13 by the Bureau of Supplies and Accounts, Washington, for pipe, fittings, etc.

*DREDGING.—Savannah, Ga.—Bids are asked by Col. Dan C. Kingman, Corps Engrs., U. S. A., until noon, Oct. 1, for dredging harbor at Savannah.

WHARF.—Shelbourne, N. S.—Bids will be received until Sept. 6 by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for constructing a wharf here.

*DREDGING.—Portland, Me.—Bids are asked by Lieut.-Col. George A. Zinn, Portland, until noon, Sept. 24, for dredging at East Boothby Harbor, Me.

*DREDGING.—Norfolk, Va.—Bids will be received until noon, Sept. 21, by Lieut.-Col. Mason M. Patrick, Corps Engrs., U. S. A., for dredging in harbor at Norfolk.

*DREDGING.—Norfolk, Va.—Bids are asked until noon, Sept. 29, by Lieut.-Col. Mason M. Patrick, Corps Engrs., U. S. A., for dredging Onancock River and Bar,

*DREDGING.—Boston, Mass.—Bids are asked by Col. Frederic V. Abbot, Corps Engrs., U. S. A., Boston, until noon, Sept. 26, for dredging in Hingham Harbor, Mass.

STEEL BINS.—Los Angeles, Cal.—Bids have been received as follows by the city for steel bins: Llewellyn Iron Works, Los Angeles, $5,250; Fulton Engine Works, $3,77

DREDGING.—Montgomery, Ala.—Bids are asked until 1 p. m., Sept. 16, by Capt. H. B. Ferguson, Corps Engrs., U. S. A., for dredging at entrance to Saint Andrews Bay, Fla.

DREDGING.—Norfolk, Va.—Bids are asked by Lieut.-Col. Mason M. Patrick, Corps Engrs., U. S. A., until noon, Sept. 22, for dredging south branch of Elizabeth River, Va.

TOWBOATS.—Kansas City, Mo.—Bids will be received by Major Edward H. Schulz, Corps Engrs., U. S. A., until Sept. 19, for constructing and delivering steel hull stern-wheel towboats.

*DREDGING.—Galveston, Tex.—Bids for dredging channel from Aransas Pass to Corpus Christi, Tex., will be received by Maj. G. P. Powell, Corps Engrs., U. S. A., Galveston, until noon, Sept. 27.

*ROCK.—Detroit, Mich.—Bids are asked by Col. C. McD. Townsend, Corps Engrs., U. S. A., until 3 p. m., Sept. 6, for furnishing about 9,000 tons of rock for the piers at St. Clair Flats Canal, Mich.

DITCH.—Warren, Minn.—Bids will be received by A. G. Lundgren, County Audr., until Sept. 9 for constructing Judicial Ditch No. 19, requiring about 797,381 yds. of excavation. Estimated cost, $81,291.

HOUSES.—Wheeling, W. Va.—Bids are asked until 11 a. m., Sept. 29, by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., for constructing two 2-story, 8-room lock keepers' houses at Dam No. 11, Ohio River.

BREAKWATER.—Wiarton, Ont.—Bids are asked until Sept. 13, by R. C. Desrochers, Secy. Pub. Wks. Dept., Ottawa, Ont., for the construction of an extension to the breakwater in Colpey's Bay, at Wiarton

REBALLASTING WHARF.—Spanish Ship Bay, N. S.—Bids will be received until Sept. 6 by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for reballasting, raising and extending the Hartling wharf here.

*BREAKWATER.—Portland, Me.—Bids are asked by Lieut.-Col. George A. Zinn, Corps Engrs., U. S. A., 537 Congress St., Portland, until noon, Sept. 26, for the construction of a breakwater at Matinicus Harbor, Me.

REVERBATORY FURNACES.—Douglas, Ariz.—The Douglas Copper Queen Mining Co. has prepared plans for spending $500,000 for the installation of McDougal reverbatory furnaces in connection with the company's smelter.

EXCAVATION.—Olivier, La.—Bids are asked until Sept. 15 by the Iberia and St. Mary Drainage District, at Olivier, for drainage excavation canal work to the amount of 111,000 cu. yds. H. N. Pharr is Chn.

CONDUIT.—Chicago, Ill.—GUY M. GEST, of Cincinnati, New York and Chicago, has been awarded contract for the Postal Telegraph conduit from Chicago to Hammond, Ind., a distance of 15 miles. Estimated cost, $100,000.

IRON RAILING.—New York, N. Y.—Bids will be received by the Park Board until 3 p. m., Sept. 8, for furnishing and delivering 6,000 lin. ft. of 2-pipe iron railing (No. 1, 1910), Botanical Garden, for parks, Boro. of The Bronx.

CEMENTING.—Redlands, Cal.—The Pacific Light & Power Corporation, Los Angeles, will begin at once cementing four large tunnels just completed in the mountains near Redlands. The tunnels aggregate 4,200 ft. Estimated cost, $25,000.

DITCH.—Redwood Falls, Minn.—Bids were opened on Aug. 11 for constructing County Ditch No. 12, about 172,587 ft. of 4 to 20-in. tile. Contract has been awarded to the MORTON BRICK & TILE CO., of Morton. Estimated cost, $40,000.

*RIPRAP.—Duluth, Minn.—Bids are asked until noon, Sept. 23, by Lieut.-Col. Graham D. Fitch, Corps Engrs., U. S. A., for furnishing and placing granite riprap at the upper entrance to Portage Lake Canals (Keweenaw Waterway), Mich.

DAM.—Cincinnati, Ohio.—Bids will be received by Maj. John C. Oakes, Corps Engrs., U. S. A., Custom-House, Cincinnati, until 2 p. m., Sept. 26, for constructing Dam 13, Kentucky River, with abutment and protection wall at Thirteen P. O., Ky.

*MILWAUKEE, WIS.—Plans and specifications are on file at the office of Engineering News, New York, for building reinforced concrete caissons and pile pier, removing old pier and dredging at Racine Harbor, Wis. Bids are asked until Sept. 12.

TUNNEL.—Tunnelton, W. Va.—The Baltimore & Ohio R. R. Co. has awarded contract for the construction of a 4,500-ft. tunnel and three miles of railroad to cost $2,000,000 within a short distance of Grafton, Va., to BENNETT & TALBOT, of Greensburg.

*DREDGING, DIKE.—Philadelphia, Pa.—Bids are asked by Maj. Herbert Deakyne, Corps Engrs., U. S. A., 815 Witherspoon Bldg., Philadelphia, until noon, Oct. 1, for dredging and dike construction in Delaware River between Philadelphia and Trenton.

DREDGING.—Duluth, Minn.—Contract was awarded on Aug. 19 by Maj. Graham D. Fitch, Corps Engrs., U. S. A., for dredging about 100,000 cu yds. to remove shoals at Portage Entry to the NORTHERN DREDGE & DOCK CO., of Duluth, at 20 cts. per yd.

RECONSTRUCTING WHARF. — Boston, Mass.—Bids were opened on Aug. 9 by F. S. Gore, Comr. Penal Institution Dept., of Boston, for reconstructing the Eastern Ave. wharf. Contract has been awarded to RENDLE & STODDARD, of East Boston, at $8,457.

CANAL.—Batesville, Ark.—Bids were received by the County Clerk on Aug. 23, for constructing a drainage canal from near Newark, east into Black River, to drain about 10,000 acres. Contract has been awarded to H. W. BUCHER CONSTRUCTION CO., of Cairo, Ill., at $9,522.

PIER.—Brooklyn, N. Y.—Bids will be received until Sept. 10 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing a pier from the mainland to Cob Dock, Pier D, Navy Yard, Brooklyn, as per Specification No. 1733. William M. Smith is Acting Ch. Bureau.

LEVEE.—New Orleans, La.—Bids were received on Aug. 15 by Maj. H. Burgess, Corps Engrs., U. S. A., 3338 St. Charles Ave., New Orleans, for constructing about 257,000 cu. yds. of earthwork in the Atchafalaga Levee District. Contract has been awarded to the HERCULES CO., of New Orleans, at 19.2 cts. per cu. yd.

REPAIRING FERRY STRUCTURES.—New York, N. Y.—Bids will be received by the Commissioner of Docks until noon, Sept. 8, for Contract No. 1230, for furnishing all the labor and materials required for reconstructing and repairing the ferry structures at the foot of Broadway, East River, Boro. Brooklyn.

STEPS, WALLS.—New York, N. Y.—Bids were received by the Park Board on Aug. 18, for the erection and completion of steps and adjoining walls for the Fifth Ave. entrance to Sunset Park, Boro. Brooklyn. Contract has been awarded to the CARDO-BORGIA STONE CO., 1133 Broadway, New York, at $8,631.

*CANAL.—Mexico City, Mex.—Bids are asked for the execution of all the earthworks required to open a canal, with a length of about 63 miles, and which will require the moving of 9,000,000 cu. yds. of earth, more or less. For further information apply to La Compania Agricola la Sautena, San Bernardo No. 3, Mexico City.

DREDGING.—Philadelphia, Pa.—The Philadelphia & Reading Ry. Co. has awarded contract to the ATLANTIC, GULF & PACIFIC CO., 13 Park Row, New York, for dredging the channel near Arthur Kill at Port Reading, N. J. A large pier will be constructed in connection with a timber treating plant. The dredging contract involves the removal of 250,000 cu. yds. of soil.

CLEARING AND FILLING.—Aberdeen, Wash.—Bids will be received until Sept. 28 by P. F. Clark, City Clk., for improving the Tide lands by clearing about 250 acres of streets, lots and alleys and filling 1,500,000 cu. yds. of earth and constructing about 4,000 ft. of pipe drains. Separate bids will be received for the clearing, filling and drains. Charles W. Ewart is City Engr.

PIER.—New York, N. Y.—Contract has been awarded by the Department of Docks and Ferries to the McHARG-BARTON CO., 163 Broadway, New York, for all labor and materials required for preparing for and building the exterior pier, with appurtenances, at the mouth of Whale Creek, Newtown Creek, Boro. Brooklyn, at $44,400. Bids were opened on Aug. 22. List of bidders noted on Aug. 25.

QUAY WALL.—Oakland, Cal.—Bids have been opened by the Board of Public Works for the construction of a quay wall in the estuary from Myrtle to Clay Sts., a distance of 2,000 ft. It will be 44 ft. deep, 22 ft. wide at base and 5 ft. at top. Contract has been awarded to the CARTERRA CONSTRUCTION CO., Williams Bldg., San Francisco, at $222,365. W. B. Fawcett is Secy. Bd.

ELEVATOR PLANT.—St. Louis, Mo.—Bids were received as follows on Aug. 24 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for installing a hydraulic elevator plant in the post-office at St. Louis; Otis Elevator Co., 17 Battery Place, New York, $38,684; Llewellyn Iron Works, Los Angeles, Cal., $32,928; Standard Plunger Elevator Co., 506 East 20th St., New York, $39,415.

HOSE WAGONS.—New York, N. Y.—Bids are asked by R. Waldo, Fire Comr., until 10.30 a. m., Sept. 8, for furnishing and delivering six automobile hose wagons; for furnishing and delivering one gasoline propelled and pumping engine in combination with hose wagon: for furnishing and delivering one 75-ft. aerial hook and ladder truck of self-propelling design; for furnishing and delivering two 1½-ton motor trucks.

COAL BUNKER.—Brooklyn, N. Y.—The TURNER CONSTRUCTION CO., 11 Broadway, New York, has been awarded the general contract for the construction of a 3,000-ton coal bunker of reinforced concrete, a stable and office building, and a hay storehouse, with retaining walls, railway track scales, wagon scales, paving, etc., for the Scranton & Lehigh Coal Co. at Vanderveer Park, Brooklyn. Work will be undertaken at once.

*DREDGING.—Baltimore, Md.—Bids are asked until 1 p. m., Sept. 29, by Col. Thomas L. Casey, Corps Engrs., U. S. A., Custom House, Baltimore, for dredging in Rockhall, Queenstown, Claiborne, Cambridge and Crisfield Harbors, and Susquehanna, Elk, Chester, Warwick, Choptank and Manokin rivers, Lower Thoroughfare, at or near Wenona, Deal Island and Tyaskin Creek, Md., Nanticoke River, Del. and Md., and Broad Creek River, Del.

PIPE.—Boston, Mass.—The following bids were received on Aug. 19, by the city for 640 tons of c.-i. water pipe—(a) per ton; (b) totals: Florence Iron Works, Philadelphia, Pa., (a) $21.29, (b) $14,631; Warren Foundry & Machine Co., New York, (a) $23.40, (b) $15,591; U. S. Cast Iron Pipe & Foundry Co., 71 Broadway, New York, (a) $23.40, (b) $15,601; Fred. A. Houdlette & Son, Boston, (a) $23.50, (b) $15,651; Charles Millar & Co., Utica, N. Y., (a) $25.50, (b) $16,932.

DREDGING.—Stockton, Me.—Bids were opened on Aug. 22 by Lieut.-Col. George A. Zinn, Portland, for dredging in Stockton Harbor, (a) price per cu. yd. for dredging; (b) boulders per cu. yd.: John H. Gerrish, Melrose, Mass., (a) 10.6 cts., (b) $3; J. P. O'Riorden, Charlestown, Mass., (a) 13.45 cts., (b) $20; Charles M. Cole, Fall River, Mass., (a) 18 cts., (b) $10; Bay State Dredging Co., Boston, Mass., (a) 14.2 cts., (b) $7.50; J. S. Packard Dredging Co., Providence, R. I., (a) 8.34 cts., (b) $9; P. H. Doyen Co., Portand, (a) 9.7 cts., (b) $6.

*REMOVING WRECK.—Portland, Me.—Bids were received by Lieut.-Col. George A. Zinn, Corps Engrs., U. S. A., 537 Congress St., Portland, Me., on Aug. 29, for removing wrecks of schooners "Young Brothers" and "Henry L. Peckham" in Kennebec River at Iceboro, Me., as follows: P. H. Doyen Co., Portland, $2,900; Rowe Bros. Co., Richmond, Me., $1,787; Johnston & Virden, Lewes, Del., $3,306; Lewis W. Blix, Brooklyn, $3,440; Brown & Bailey, New York, $6,700; Snow Marine Co., Rockland, Me., $2,195; F. W. Carlton, Bath, Me., $2,500.

BRICK.—Atlanta, Ga.—Bids were opened on Aug. 23 as follows by the Superintendent of Prisons, Washington, D. C., for furnishing and delivering at the U. S. Penitentiary, Atlanta, enameled brick: Item (1), 173,000 buff enameled stretchers; (2), 18,250 buff enamel bull nose; (3), 35,000 buff enamel quoins: V. H. Kriegshaber, Atlanta, Item (1) $60 per M., (2) $70, (3) $70; Hydraulic Press Brick Co., St. Louis, Mo., Item (1) $65 per M., (2) $85, (3) $70; Tiffany Enameled Brick Co., Chicago, Ill., Item (1), (2) and (3) $14,000; American Enameled Brick Tile Co., New York, Items (1), (2) and (3) $11,939.

EXTENDING PIER, ETC.—New York, N. Y.—Bids were received by the Department of Docks and Ferries on Aug. 17 for Contract No. 1220, for furnishing all the labor and materials required for preparing for, and extending the pier at the foot of West 134th St., North River, Boro. of Manhattan, known as Pier 124, North River, and for furnishing and depositing cobble and riprap thereat. The lowest bidders follow: Construction, Butler Bros. Construction Co., 1170 Broadway, New York, $32,000; riprap, O'Brien Bros., Inc., 54 South St., 47 cts. per cu. yd.; cobble, Henry Steers, Inc., 17 Battery Pl., New York, 59¾ cts. The lowest bidder for Contract 1225, for furnishing material and building new steel freight shed, with appurtenances, on pier and adjacent bulkhead at foot of West 131st St., Bor. Manhattan, was the Snare & Triest Co., 143 Liberty St., New York, at $38,135.

U. S. POSSESSIONS.

SCHOOL HOUSES.—Alaska.—M. ARVESEN 219 Spring St., Seattle, Wash., has been awarded contract by the Board of Home Missions of the Presbyterian Church of America for erecting at Sitka a group of six frame school houses at about $56,000.

WELDING AND CUTTING PLANT, ETC. —Panama.—Bids will be received until Sept. 9 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing oxy-acetylene welding and cutting plant, cold-rolled steel, bronze, valves, etc., as per circular No. 601.

BARRACKS, ETC.—Hawaii.—Plans are being prepared by the War Department, Washington, D. C., for barracks and officers quarters of the permanent cavalry post at Scofield Barracks in Hawaii, with a view to accommodating a regiment of cavalry. Plans will be ready for bidders in six weeks. Estimated cost, $600,000.

BARRACKS.—Hawaii.—Bids were received as follows on Aug. 25 by the Quartermaster of the Marine Corps, Washington, D. C., for the construction of barracks at the Marine Corps quarters, Honolulu, H. T., (a) one barracks, (b) two junior officers' quarters, (c) one senior officer's quarters, (d) three servants' houses: Hawaiian Dredging Co., Monadnock Bldg., San Francisco, Cal., (a) $198,000, (b) $50,000, (c) $25,000, (d) $15,000; Moses Fisher, Pacific Bldg., San Francisco, (a) $190,177, (b) $43,866, (c) $25,303, (d) $13,041; Lord-Young Engineering Co., Honolulu, (a) $150,836, (b) $31,311, (c) $14,669, (d) $9,501; Sound Construction & Engineering Co., Seattle, Wash., (a) $170,805, (b) $41,303, (c) $17,325, (d) $11,610.

MACHINERY.—Panama.—Bids will be received at the office of Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., until Sept. 16, for furnishing and erecting machinery to operate the Stoney Gate valves for controlling the main culverts and machinery to operate the cylindrical culverts of the upper lock at Gatun and the Pedro Miguel Lock. Blanks and general information relating to this circular (No. 596) may be obtained from the above office or the offices of the Asst. Purchasing Agents, 24 State St., New York; 55 National Realty Bldg., New Orleans, La.; and 1086 North Point St., San Ffancisco, Cal.; also from the U. S. Engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Md.; Philadelphia, Pa.; Pittsburg, Pa.; Boston, Mass.; Buffalo, N. Y.; Cleveland, Ohio; Cincinnati, Ohio; Chicago, Ill.; St. Louis, Mo.; Detroit, Mich.; Milwaukee, Wis.; St. Paul, Minn.; Chattanooga, Tenn.; Louisville, Ky.; Mobile, Ala.; and Galveston, Tex.; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill.; and Chamber of Commerce and Board of Trade, Tacoma, Wash.

CONTRACT PRICES.

(**Denotes that this work is advertised in Engineering News.*)

(See also pp 108, 109 and 110.)

EXCAVATION.—Barre, Vt.—Bids were received Aug. 11 for excavating river channel at Barre, Vt., from the following: (A) E. W. Normande, Barre, Vt.; (B) JOSEPH LORY & CO., Leominster, Mass. (awarded contract); (C) Rowe Contracting Co., Boston, Mass.; (D) Douglas, Varnum & Gilfillare, Barre, Vt.; (E) R. H. Newhall & Co.; (F) Brown & Bailey, New York City. The itemized bids were as follows:

EXCAVATING RIVER CHANNEL, BARRE, VT.

	A	B	C	D	E	F
18,000 cu. yds. earth excavation	$0.34	$0.38	$0.95	$0.39	$0.42	$0.80
3,000 cu. yds. rock excavation	3.20	3.00	2.50	3.20	3.00	4.00
2,500 cu. yds. dry rubble wall masonry	3.00	3.25	3.50	5.15	4.00	4.00
300 cu. yds. rubble wall laid in mortar	4.50	6.00	6.50	5.90	6.00	5.00
1,300 cu. yds. riprap	.40	1.00	1.00	.90	1.00	1.50
900 cu. yds. culvert	2.90	4.00	6.00	5.25	6.00	4.00
200 sq. yds. paving	1.00	1.50	2.00	1.00	.75	1.50
400 lin. ft. laying 24-in. sewer tile	.50	.60	.30	2.00	1.75	1.00
300 lin. ft. laying 8 to 12-in. sewer tile	.25	.50	.25	.20	.55	.75
5 manholes and receivers	8.00	45.00	40.00	10.00	25.00	50.00
30,000 cu. yds. refilling	.50	.39	.40	.49	.55	.50
Total	$43,215	$43,280	$54,795	$52,970	$52,700	$54,825

EXCAVATION.—Chicago, Ill.—Bids were received Aug. 8 by Major Thomas H. Rees, Corps of Engrs., U. S. Army, for excavating Chicago River, from the following: (A) Buffalo Dredging Co., Buffalo, N. Y.; (B) The Fitzsimons & Connell Co., Chicago, Ill.; (C) Great Lakes Dredge & Dock Co., Chicago, Ill. The itemized bids were as follows:

EXCAVATING, CHICAGO RIVER.

	A	B	C
4,000 cu. yds. earth	$0.70	$0.45	$0.35
2,800 cu. yds. rock at Fullerton Ave. bridge	7.00	7.50	6.00
17,200 cu. yds. rock above Fullerton Ave. bridge	7.00	5.25	4.90
Total	$142,800	$113,100	$102,480

LYNCHBURG, VA.—Bids for the improvement of Taylor, Wise and 14th St. were received by H. L. Shaner, City Engr.: (A) Burnett Bros.; (B) S. B. Bennington; (C) J. R. Ford; (D) I. J. Smith & Co. (E) Lang & Miller. The itemized bids are as follows:

STREET IMPROVEMENTS, LYNCHBURG, VA.

	A.	B.	C.	D.	E.
3,500 cu. yds. excavation	$0.44	$0.42	$0.38	$0.40	$0.40
1,100 sq. yds. concrete foundation	1.50	1.60	1.50	1.60	2.00
1,100 sq. yds. brick paving	2.30	2.31	2.25	2.14	2.50
4,500 sq. yds. tar macadam	1.35	1.37	1.34	1.24	1.32
3,600 lin. ft. concrete curb	.45	.41	.40	.40	.40
3,600 lin. ft. concrete gutter	.20	.22	.20	.25	.30
675 sq. yds. granolithic walks	1.20	1.24½	1.18	1.30	1.20
575 lin. ft. stone strip crossing	.85	.75	.80	.60	.70
600 lin. ft. corner bar	.30	.28	.25	.33	.25
Sewer inlets	14.00	16.00	14.00	20.00	15.00
11 trapped sewer inlets	32.00	28.00	29.00	30.00	30.00
700 sq. yds. broken stone roadway	.50	.52	.60	.80	.60
135 stepping stones (to be removed)	.15	.25	.15	.20	.04
540 lin. ft. strip walk (to be removed)	.05	.08	.05	.10	.04
340 stepping rocks (to be removed)	.05	.02	.03	.20	.04
200 lin. ft. old curb to be reset	.16	.20	.12½	.20	.20
35 sq. yds. brick walks to be removed	.10	.08	.10	.20	.05
240 sq. yds. rubble to be relaid	.65	.60	.45	.40	.40
1,300 sq. yds. broken stone roadway	.45	.30	.30	.20	.40
150 cu. yds. dry rubble wall pointed	3.75	4.00	3.50	4.50	4.00
50 cu. yds. dry rubble wall (old material)	2.35	2.50	2.00	2.50	2.00
Totals	$17,850	$17,717	$17,013	$17,116	$17,336

FOREIGN CONTRACTS.

ELECTRIC CRANES.—Belgium.—Bids will be received at the Direction Generale des Ponts et Chaussees, Rue de Louvain 38, Brussels, until Sept. 11, for the supply and installation on the tidal quay at Ostend of four electric traveling cranes.

ELECTRIC RAILWAY.—Italy.—The Direzione Generale della Ferrovie dello Stato, at Rome, has prepared a project for the electrification of about 553 miles of the Italian State railways. For this end, a hydro-electric plant, capable of supplying a current of 40,000 volts, would be set up near the River Wuocken.

RESERVOIRS.—India.—A project has been sanctioned by the Nizam of Hyderabad for the construction near the city of Hyderabad, by the two branches of the Musi and Easi rivers which join at Golconda, of two large water reservoirs, at an approximate cost of $3,000,000 and $1,500,000, respectively. The works are for the purpose of protecting the city of Hyderabad from floods.

MACHINERY.—Argentina.—A decree has been issued authorizing the Direccion General de Contabilidad, Buenos Aires, to invite bids for the suply of machines required for the workshops in connection with the various surveying commissions under the Direccion General de Obras Hidraulicas. The estimated cost of the machines is $60,000. They will be admitted into the Republic free of duty.

RAILWAY.—Bolivia.—A proposal has been made by the Madeira-Mamore Railway Co. to the Bolivian Government for the construction of a branch railway from the Madeira-Mamore line, across the River Mamore, near the Cachuela de Palo Grande, to the bank of the Beni River, above the Cachuela Esperanza. The line would be about 17 miles long, and of metre gage. The Government have accepted the proposal, with some modifications, subject to ratification by the Legislature in its next session. The New York office of the company is at 115 Broadway.

FILTRATION. — Egypt. — The Department of Municipalities and Local Commissions of the Ministry of the Interior, Cairo, intends to make provision during the next few years for supplying filtered Nile water in a number of towns in Egypt. The Department desires to study thoroughly the different systems of filtration, with a vie wto finding the most suitable for its purpose, and accordingly invites firms interested to submit to the Department, before Nov. 1, detailed particulars of their schemes, together with an approximate estimate of the cost of an installation.

RAILROAD.—Argentina.—The government has published a decree approving the plans presented by the Buenos Aires & Pacific Railway Co. for the construction of the second section of the AlberdiSampacho railway, from the point of junction with the Villa Maria-Rufino line for a distance of about 104 miles.

Announcement is made of approval of the plans made by the Direccion General de Ferrocarriles, Buenos Aires, for the first section of the Comodoro Rivadavia—Lake Buenos Aires railway. The section will be about 65 miles in length, and the total cost, including rolling stock, is estimated at $2,631,200.

RAILWAY SHOPS.—Japan.—It is proposed to set up government railway workshops at Oi, near Tokio. The site for the workshops covers more than 3,000,000 sq. ft., and the area to be covered by the main workshop is put at 1,000,000 sq. ft. The workshops, which should be completed by the end of 1912, are to be used for the repair of passenger and freight cars, and the machinery at the present railway workshops at Shimbashi is to be transferred to Oi. Cars are now built at the government railway workshops at Omiya, as well as at private factories at Osaka and Nagoya, and it is probable that the operations of the workshops at Oi will eventually extend to the manufacture of these vehicles. The question of constructing the workshops has not yet been finally settled.

COLLECTING WORKS.—Russia.—Bids will be received by the Municipal Administration of Bakou, N. W. Rajewski, Mayor, until Oct. 27, for the executing of the collecting works, consisting of 13 tube wells of 1,000 mm. diameter, with a collective syphon of 400 mm. to 750 mm. diameter, and 2,245 m. in length, and of the conduit to Bakou, consisting of the following: A masonry conduit, 120 cm. by 170 cm., 137 kilometers in length; a masonry conduit, 100 cm. and 120 cm. by 150 cm., 17 kilometers in length; inverted iron syphons, 1,200 mm. diameter, 10 kilometers in length; inverted iron syphons and pumping main, 800 mm. diameter, 22 kilometers in length; a tunnel, 810 mm. in length, with all necessary works, and including supply and delivery of materials. The plans, sections and drawings, and the specification and bills of quantities and schedule of prices can be seen at the city water-works office in the town hall in Bakou and in the office of W. H. Lindley, M. Inst. C. E., 29, Blittersdorffs Platz, Frankfort-a-M., Germany, at which offices all further information can be obtained. The specification, bill of quantities, and schedule of prices and the form of proposal can be obtained at the above-named places in three copies on payment of 21s. A copy of the general design will be furnished on application to the Uprawa (Municipal Administration) at Bakou on payment of £8.

IMPROVEMENTS.—Uruguay.—U. S. Consul Frederic W. Goding, of Montevideo, reports the following list of contemplated changes in Uruguay: The committee of the House of Deputies has reported favorably on the proposal to establish floating docks in the port. The Mayor of Montevideo has been authorized to spend about $50,000 in the installation of electric lights in various parks and suburban avenues. The Government has authorized the purchase of 40 illuminated buoys to complete the coastal light service; they will cost about $80,000. Bids were called for by the Interior Department for asphalt paving of 35,880 sq. yds., with the privilege of an increase to 59,800 sq. yds., but as the bids were to be submitted Aug. 9, the information is only of possible value to American builders of machinery for paving work. The President has presented a bill for the extension and completion of the port works, which will require the expenditure of over $13,000,000. It will include the building of more moles, deepening the entire harbor to 37.5 ft., and several other improvements. The concession for building the railway from Tres Arboles to Piedra Sola has been approved. Two Montevideo banks are arranging to erect 5,000 houses, to be sold on monthly installments; each house will contain four to six rooms. The Messina plan of construction will be followed. The new public improvements approved by the Montevideo Municipal Board are the following: Prolongation of the Boulevard Artigas from the Avenue Brazil to Punta Carretas; continuation of the Pocitos embankment, from Trouville point to the Boulevard Artigas; construction of a plaza, to be called "Tomas Gomensoro," at Trouville; various improvements, and enlargement of the lake, in Parque Urbano; prolongation of the Avenue Brazil from its first turning to the Parque Urbano, building of the Casino Hotel in Prado, rearrangement of the gardens, and construction of a rose garden; and construction of the Central Park.

EXAMINATIONS.

ASSISTANT IN WIRELESS TELEPHONY.—The U. S. Civil Service Commission announces the postponement to Sept. 21, of the examination scheduled for Aug. 24. The person appointed to the position for which this examination is held will probably be located for the major portion of his time in Washington, D. C., engaged upon the work of the development and adaptation of wireless telephony to the fixed and mobile station of the Signal Corps. He may also be required to travel about the United States visiting wireless-telephone stations, which visits may be of a few days' or several months' duration. Applicants should at once apply to the U. S. Civil Service Commission, Washington, D. C., for Form 1312. No application will be accepted unless properly executed and filed with the Commission at Washington, prior to the closing of business, Sept. 10. Salary, $1,080 per annum.

EXAMINER OF CHARITABLE INSTITUTIONS.—Municipal Civil Service Commission, New York.—Public notice is hereby given that applications will be received until Wednesday, Sept. 14.

EXAMINER.—The U. S. Civil Service Commossion announces an examination on Sept. 26, to fill a position on the examining force of the Commission, at an entrance salary of $2,000 per annum. It is desired to secure for this position a person of broad scientific training, who is a graduate in a full agricultural course in a college of recognized standing and who has taken postgraduate work. Men only will be admitted to this examination.

Applicants must have reached their twenty-first birthday, but not their fortieth birthday, on the date of the examination.

For applications apply to the U. S. Civil Service Commission, Washington, D. C., Form 304 and special form. No application will be accepted prior to the hour of closing business on Sept. 26.

ELECTRICAL ASSISTANT.—The U. S. Civil Service Commission announces an examination on Oct. 5, to secure eligibles for the position of electrical assistant in the Signal Service at Large, at New York City, at $1,500 per annum. Age limit, 20 years or over on the date of the examination. Applicants should at once apply either to the U. S. Civil Service Commission, Washington, D. C., or to the Secretary of the Board of Examiners. No application will be accepted unless properly executed and filed with the Commission at Washington prior to the hour of closing business on Sept. 24. Application form No. 1312.

INSPECTOR, BOARD OF WATER SUPPLY.—Application will be received by the Municipal Civil Service Commission until 4 p. m., Sept. 8, for inspector. Candidates should be active, energetic men in sound health. They will be required to pass a physical examination. Graduates of technical schools of recognized standing are desired. Assignments will be made from this list to any part of the State, and appointees are expected to live near their work. The examination will be largely on general lines, but the knowledge of candidates in question respecting the construction of works for the storage and distribution of water will also be tested. The compensation is at the rate of $120 a month when Inspectors are working on the surface, and $130 a month when working in the shafts or tunnels. The minimum age is 22 years.

LIST OF CONTRACTS PENDING.

Light, Heat and Power Plants.

Bids open.		Noted in issue of
9- 3	Electric elevator, National Military Home, Kan	9- 1
9- 4	Wiring, Winnipeg, Man	9- 1
9- 5	Light plant, Princeville, Ill	8-18
9- 6	Elec. equipment, New York	8-25
9- 7	Gas and elec fixtures, Peru, Ind	8-18
9- 7	Lighting fixtures, Brooklyn, N. Y.	8-25
9- 7	Power-house, Athens, Ga	9- 1
9-10	Power plant additions, Annapolis, Md	9- 1
9-10	Elec light, Charlottetown, P. E. I.	8-18
9-10*	Pump and motors, Hot Springs, Ark	8-11
9-12	Heating, etc., New York	9- 1
9-12	Gas, etc., Boston, Mass	9- 1
9-14	Wiring ducts, etc., Winnipeg, Man.	9- 1
9-14	Light fixtures, Washington, D. C.	8-25
9-15	Elec. apparatus, Washington, D. C	7-28
9-19	Elec. wiring, Youngstown, Ohio.	9- 1
9-27*	Power-house, etc., Wheeling, W. Va.	9- 1
10- 1*	Power plant, Annapolis, Md	8-25

Bridges.

Bids open.		Noted in issue of
9- 2	Bridge, Cuyahoga Falls, Ohio	8-25
9- 2	Bridges, Cincinnati, Ohio	8-18
9- 2	Bridge work, Chicago, Ill	9- 1
9- 3	Bridge, Steubenville, Ohio	8-25
9- 5	Bridge, Meridian, Miss	8-25
9- 5	Bridges, Leavenworth, Kan	8-18
9- 5	Bridge repair, Gaffney, S. C	7- 7
9- 5	Drawbridge, Marksville, Miss	9- 1
9- 6	Bridges, Pearisburg, Va	9- 1
9- 6	Bridge work, Washington, Pa	9- 1
9- 6	Bridge, etc., Waco, Tex	9- 1
9- 6*	Viaduct, Toronto, Ont	7-28
9- 6	Bridges, Jasper, Ind	8-18
9- 6	Bridge, Stillwater, Okla	8-25
9- 6	Bridge, Delaware, Ohio	8-25
9- 7	Bridge, Ashland, Ohio	8-25
9- 7	Bridge, Crown Point, Ind	8-25
9- 7	Bridges, Frederick, Okla	8-25
9- 7	Bridges, Bismarck, N. Dak	8-25
9- 7	Bridges, Carthage, Mo	9- 1
9- 7	Bridges, North Yakima, Wash	9- 1
9- 8	Bridge work, Willows, Cal	9- 1
9- 8	Bridges, Rockport, Ind	8-25
9- 8	Bridges, Lebanon, Ind	8-25
9- 8*	Bridge work, Wilkes-Barre, Pa	8-18
9- 9*	Bridge, Van Buren, Me	8-11
9-12	Bridges, etc., Allentown, Pa	9- 1
9-12	Bridge, Muskogee, Okla	9- 1
9-12	Bridge, Eureka, Cal	9- 1
9-14	Bridge work, Columbus, Ohio	8-25
9-19	Bridge work, Lisbon, Ohio	8-25
10- 1*	Superstructure, Quebec, Que	8-18

Buildings.

Bids open.		Noted in issue of
9- 2*	Quarters, Ft. Monroe, Va	8- 4
9- 3	Church bldgs., Peterboro, Ont	9- 1
9- 5	School addition, Faribault, Minn.	8-25
9- 6	Machine shop, Peterboro, Ont	9- 1
9- 6	Building alterations, Morrisville, N. Y	8-25
9- 6	Infirmary, Hartford, Conn	7-28
9- 6	Post-office, San Marcos, Tex	8- 4
9- 6*	Shops, Ft. Du Pont, Del	8-11
9- 6	Truck house, Albany, N. Y	8-11
9- 6*	Court-house plans, Tulsa, Okla	8-11
9- 6	Observatory, Key West, Fla	8-18
9- 6	Public school work, New York	8-25
9- 7	Cottages, etc., Sandusky, O	8-18
9- 7	Building, Arthabaska, Que	9- 1
9- 7	Warehouse, etc., Sandusky, O	9- 1
9- 8	Greenhouses, New York	9- 1
9- 8	Post-office, Beverly, Mass	8-11
9-8	Building impvts., Philadelphia, Pa.	9- 1
9- 9*	Post-office, Port Arthur, Tex	8- 4
9- 9*	Building, Ft. Monroe, Va	8-11
9- 9	Buildings, Columbus, Ohio	8-25
9-10	High school, Wawaka, Ind	8-25
9-10	Plans, Albany, N. Y	6- 9
9-12	Post-office, Lexington, Mo	8-11
9-12	Building, Kankakee, Ill	8-25
9-12	Public bldg., Roberval, Que	9- 1
9-13	Post-office, York, Pa	8- 4
9-14	Post-office, Webster, Mass	8-11
9-15*	Post-office, Waycross, Ga	8-11
9-15	Plant, Salisbury, N. C	8-25
9-16*	Post-office, Harriman, Tenn	8-11
9-16	Fire-house, Mishawaka, Ind	9- 1
9-19	Post-office, Plattsmouth, Neb	8- 4
9-20	Post-office, Easton, Pa	8-18
9-21*	Post-office, Warrensburg, Mo	8-18
9-22	Post-office, Clinton, Mo	8-11
9-22	Officers' quarters, Fort Hamilton, N. Y	9- 1
9-26	Post-office, Greensburg, Pa	8-25
9-29	Post-office, Platteville, Wis	9- 1
10- 1	Buildings, Tacoma, Wash	8-25
10- 1	Hotel, Indianapolis, Ind	9- 1
10- 1*	Freight house, El Paso Tex.... (Mfg. Pl.)	9- 1
11- 1	Plans, Toronto, Ont	6- 9

Water-Works.

Bids open.		Noted in issue of
9- 2	Pig lead, Cleveland, Ohio	8-25
9- 2*	Water-works, Cozad, Neb	8-11
9- 3	Canal work, Sanders, Mont	8-18
9- 5	Filter, Grand Forks, N. Dak	8-11
9- 5	Water pipe, Italy (Foreign)	8- 4
9- 5	Water mains, Conneaut Lake, Pa.	8-25
9- 5	Tank and tower, etc., Leakesville, Miss.	9- 1
9- 5	Wells, Bottineau, N. Dak	9- 1
9- 6*	Reservoir, etc., Waterloo, N. Y	8-25
9- 6*	Water-works, Arapaho, Okla	8-25
9- 6	Water plant, Pella, Iowa	8-25
9- 6	Water-works, Cleveland, Miss	8-18
9- 8*	Filtration plant work, Grand Rapids, Mich	8-25
9- 9	Water mains, Carrington, N. Dak.	8-25
9- 9	Pumps, Rossville, Ill	9- 1
9-10	Pump and motors, Hot Springs, Ark	8-25
9-12*	Pipe, Portland, Me	8-18
9-14	Laying pipe, etc., Montreal, Que.	8-25
9-14*	Pumping engines, Parkersburg, W. Va.	9- 1
9-15	Tank and tower, Toulon, Ill	9- 1
9-16	Bridges, Harrisburg, Pa	8-25
9-17	Water mains, Newburg, Ohio	9- 1
9-17*	Pump, Sioux City, Iowa	9- 1
9-20*	W.-wks. bonds, Belle Fourche, S. Dak	8-25
9-20*	Pumping engine, Detroit, Mich	8-18
9-26	Cisterns, Fort Howard, Md	9- 1
9-27*	Water and sewer system, Thiells, N. Y.	9- 1
9-29*	Pumps, Evansville, Ind	8-18

Sewers.

Bids open.		Noted in issue of
9- 2*	Sewer, Louisville, Ky	8-25
9- 2	Sewer, North Braddock, Pa	8-25
9- 2	Sewers, Elyria, Ohio	9- 1
9- 2	Sewers, Youngstown, Ohio	9- 1
9- 3	Sewers, Howarden, Ia	9- 1
9- 3	Sewers, Newburg Heights, Ohio	8-18
9- 5*	Sewers, Centreville, Md	8-25
9- 5	Sewer, New Castle, Ind	8-25
9- 5	Sewers, Grand Forks, N. D	9- 1
9- 5	Sewers, Watertown, Wis	9- 1
9- 6	Sewers, Sioux Falls	9- 1
9- 6	Sewers, Emmetsburg, Ia	9- 1
9- 6	Sewers, Trenton, N. J	9- 1
9- 6	Sewers, Youngstown, Ohio	9- 1
9- 6	Sewer pipe, Emmetsburg, Iowa	8-25
9- 6	Sewer, Upper Sandusky, Ohio	8-25
9- 7*	Sewers, etc., Baltimore, Md	8-18
9- 7	Sewers, Milwaukee, Wis	9- 1
9- 7	Sewers, Boulder Creek, Cal	9- 1
9- 7	Sewers, Baltimore, Md	9- 1
9- 8	Sewers and disposal works, Saskatoon, Sask.	9- 1
9- 8	Sewers, Owasso, Mich	9- 1
9- 9	Sewers, Carrington, N. Dak	8-25
9-10	Sewer extensions, Greenville, S. C.	8-25
9-10	Sewers, Charleroix, Mich	9- 1
9-12	Sewers, Denver, Colo	9- 1
9-13*	Sewer, Olean, N. Y	8-25
9-14	Sewers, Brooklyn, N. Y	9- 1
9-17	Sewers, Newburg, Ohio	9- 1
9-19	Sewers, Columbus, Ind	9- 1
9-19	Sewer system, Brawley, Cal	8-25
9-24	Sewers, Nottingham, Okla	9- 1
10- 1	Sewers, etc., West View, Pa	8-18

Streets and Roads.

Bids open.		Noted in issue of
9- 1	Roads, Birmingham, Ala	9- 1
9- 2	Paving, Columbus, Ohio	9- 1
9- 2	Macadam, Columbus, Ohio	8-11
9- 2	Grading, etc., Huntington, W. Va.	8-18
9- 2	Road, Toledo, Ohio	8-25
9- 2	*Paving, Hackensack, N. J	8-25
9- 2	State roads, Hartford, Conn	8-25
9- 3	Gravel road, Kittery, Me	9- 1
9- 5*	Sidewalks, etc., Paducah, Ky	9- 1
9- 5	Paving, etc., Attalla, Ala	9- 1
9- 5	Grading, etc., Vicksburg, Miss	8-18
9- 5	Road, Fowler, Ind	8-18
9- 5	Macadam road, Decatur, Ind	8-11
9- 5	Macadam road, Rushville, Ind	8-11
9- 5	Pike road, Vernon, Ind	8-11
9- 5	Gravel road, Jeffersonville, Ind	8-11
9- 5	Resurfacing, Columbus, Ohio	8-11
9- 6	Shell road, West Palm Beach, Fla	8-11
9- 6	Gravel road, Vincennes, Ind	8-11
9- 6*	Paving, Bronxville, N. Y	8-18
9- 6	Gravel road, Wabash, Ind	8-11
9- 6	*Stone road, New Brunswick, N. J.	8-18
9- 6	Roads, Crown Point, Ind	8-18
9- 6	Road, Spencer, Ind	8-18
9- 6	Roads, Paoli, Ind	8-18
9- 6	Road, Salem, Ind	8-25
9- 6	Roads, Peru, Ind	8-25
9- 6	Road, Sullivan, Ind	8-25
9- 6	Grading, Youngstown, Ohio	8-25
9- 6	Grading, etc., Yakima, Wash	9- 1
9- 6	Curbing, etc., Davenport, Iowa	9- 1
9- 6	Walks, etc., Kewanee, Ill	9- 1
9- 6	Paving, Trenton, N. J	9- 1
9- 7	Grading, etc., Newark, Ohio	9- 1
9- 7	Street impvts., Oakland, Cal	9- 1
9- 7	Highways, Muncie, Ind	8-25
9- 7*	Street impvt., Mt. Pleasant, N. Y.	8-18
9- 7	Roads, Lafayette, Ind	8-18
9- 8*	Dam, etc., New Haven, Conn	8-25
9- 8	Gravel road, Lebanon, Ind	8-11
9- 8	Roadway, Oakland, Cal	8-25
9- 8	Grading, etc., Newark, N. J	8-25
9- 8	Paving, etc., Atlantic, Iowa	9- 1
9- 8	Paving, etc., New York	9- 1
9- 9	Paving, Hammond, Ind	9- 1
9- 9	Surface graveling, Concord, N. H.	8-25
9-10	Road repairs, Cleveland, Ohio	9- 1
9-10	Pike, Delaware, Ohio	9- 1
9-12	Paving, etc., New York	9- 1
9-12	Pike, Columbus, Ohio	9- 1
9-12	Macadam road, Fort Du Pont, Del	8-25
9-12*	Resurfacing, etc., Scarsdale, N. Y.	8-25
9-13*	Pavement, Olean, N. Y	8-25
9-13	Walks, etc., Waterbury, Conn	9- 1
9-13	Sidewalks, etc., New York, N. Y.	9- 1
9-14	Grading, etc., New York, N. Y	9- 1
9-14*	Stone road, Tenafly, N. J	8-25
9-15*	Road, Avalon, N. J	8-25
9-15	Gravel road, Vernon, Ind	8-11
9-16	Paving, Seattle, Wash	9- 1
9-16	Paving, Wapakoneta, Ohio	9- 1
9-16	Road construction, Harrisburg, Pa	8-25
9-17	Curb, etc., Muncie, Ind	9- 1
9-19	Paving, Montgomery, Ala	9- 1
9-19	Paving, Lakewood, Ohio	8-25

Miscellaneous.

Bids open.		Noted in issue of
9- 2	Breakwater, Cleveland, Ohio	8-18
9- 2	Breakwater, Lorain, Ohio	8-18
9- 2	Dredging, Toledo, Ohio	8-18
9- 2*	Pier, etc., Boston, Mass	8- 4
9- 2*	Breakwater, Bar Harbor, Me	8- 4
9- 2	Repairs to ferryboat, New York.	8-25
9- 3	Riprap, Washington, D. C	8-11
9- 3	Drainage, Freedom, Ill	8-25
9- 6*	Dredging, Jacksonville, Fla	8-11
9- 6	Ditch, etc., Clark, S. Dak	7-28
9- 6*	Incinerator plants (Garbage), Racine, Wis	8-18
9- 6	R. R. materials, Toronto, Ont	8-18
9- 6	Removing wreck, Boston, Mass	8-18
9- 6	Ditch, Nevada, Iowa	8-25
9- 6	Sanitary apparatus, Cleveland, Ohio	8-25
9- 6	Reballasting wharf, Spanish Bay, N. S.	9- 1
9- 6	Wharf, Shelburne, N. S	9- 1
9- 6*	Rock, Detroit, Mich	9- 1
9- 7*	Lock and dam, Mobile, Ala	8-18
9- 7*	Walls, dams, etc., Jacksonville, Fla	8-11
9- 7*	Barge canal, Albany, N. Y	8-11
9- 8*	Riprap, New London, Conn	8-11
9- 8*	Dredging, San Diego, Cal	8-11
9- 8*	Dredging, Savannah, Ga	8-11
9- 8*	Dredging, Jacksonville, Fla	8-11
9- 8*	Locks and dams, Pittsburg, Pa	8-11
9- 8	Gun turrets, Washington, D. C	7-28
9- 8*	Hoisting apparatus, New York	8-25
9- 8*	Dam, etc., New Haven, Conn	8-25
9- 8	Hose wagons, New York	9- 1
9- 8	Iron railing, New York	9- 1
9- 8	Repairing ferry structures, N. Y	9- 1
9- 9	Ditch, Warren, Minn	9- 1
9- 9*	Lock, dam, etc., New Orleans, La	8-18
9- 9	Welding and cutting plant, Panama (U. S. Poss.)	9- 1
9-10	Dredging, Los Angeles, Cal	8-18
9-10*	Dredging, Galveston, Tex	8-18
9-10	Pier, Brooklyn, N. Y	9- 1
9-11	Elec. cranes, Belgium (Foreign)	9- 1
9-12*	Caissons, pier, etc., Milwaukee, Wis.	8-18
9-12	Dredge, Ottawa, Ont	8-25
9-12*	River improvement, Des Moines, Iowa	8-25
9-12*	Vacuum heating system, Washington, D. C	8-25
9-13	Breakwater, Wiarton, Ont	9- 1
9-13	Pipe, etc., Wash., D. C	9- 1
9-15	Excavation, Olivier, La	9- 1
9-15*	Dredging, Philadelphia, Pa	8-18
9-15*	Dredging, Bridgeport, Conn	8-18
9-16	Machinery, Panama (U. S. Poss.)	9- 1
9-16*	Lock, guidewalls, etc., Wheeling, W. Va.	8-18
9-16*	Lock and dam, Wheeling, W. Va.	8-18
9-16*	Lock machinery, Panama	7-21
9-16	Dredging, Montgomery, Ala	9- 1
9-19	Towboats, Kansas City, Mo	9- 1
9-19*	Seawall, New Orleans, La	8-11
9-19*	Dredging, Galveston, Tex	8-25
9-19	Dredging, Norfolk, Va	8-25
9-19*	Oil-house, Fort Hancock, N J	8-25
9-19*	Riprap jetties, Portland, Me	8-25
9-20*	Dredging, Baltimore, Md	8-25
9-20	Dredging, Norfolk, Va	8-25
9-20	Garbage plant, El Paso, Tex. (Garbage),	9- 1
9-20	Gun turrets, Washington, D. C	7-28
9-21*	Dredging, Norfolk, Va	9- 1
9-22	Dredging, Norfolk, Va	9- 1
9-22*	Dredging, Washington, D. C	8-25
9-23*	Insulated cable, New London, Conn	8-25
9-23*	Metal shelving, Trenton, N. J	8-25
9-23*	Dredging, Mobile, Ala	8-25
9-23*	Riprap, Duluth, Minn	9- 1
9-24*	Dredging, Portland, Me	9- 1
9-26*	Dam, Cincinnati, Ohio	9- 1
9-26*	Dredging, Boston, Mass	9- 1
9-26*	Breakwater, Portland, Me	9- 1
9-27*	Dredging, Galveston, Tex	9- 1
9-28	Clearing and filling, Aberdeen, Wash.	9- 1
9-29	Houses, Wheeling, W. Va	9- 1
9-29*	Dredging, Norfolk, Va	9- 1
9-29*	Dredging, Baltimore, Md	9- 1
10- 1*	Dredging, Savannah, Ga	9- 1
10- 1*	Dredging, Pike, Phila., Pa	9- 1
10-20*	Dredge, etc., Vicksburg, Miss	8-25
10-27	Collecting wks, Russia (Foreign)	9- 1

Examinations.

Application received.		Noted in issue of.
9- 6	Supervising Engr., Evansville, Ind	8-18
9- 7	Computer, Washington, D. C	8-11
9- 8	Inspector, Water Supply, New York	9- 1
9-14	Civil engr., Washington, D. C	8-11
9-21	Assistant in Wireles Telephony, Washington, D. C	9- 1
9-26	Examiner Wash., D. C	9- 1
10- 5	Inspector, Fort Crockett, Tex	8-25
10- 5	Xylotomist, Washington, D. C	8-25
10- 5	Electrical assistant, Wash, D. C.	9- 1

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 220 Broadway, New York.

9- 2*	Breakwater, Bar Harbor, Me.(S.)	8- 4
9- 2*	Pier, Boston, Mass......(P. & S.)	8- 4
9- 5*	Sewers, Centerville, Md.(P. & S.)	8-25
9- 6*	Viaduct, Toronto, Ont..(P. & S.)	7-28
9- 7*	Lock & Dam, Mobile, Ala..(P&S)	8-11
9- 9*	Bridge, Van Burean, Me.(P. & S.)	8-11
9-10	Dredging, Los Angeles, Cal..(S.)	8-18
9-10	Sewer extensions, Greenville, S. C. ....(S.)	8-25
9-10	Power plant additions, Annapolis, Md....(S)	9- 1
9-10*	Dredging, Galveston, Tex.....(S)	8-18
9-12*	Caissons, pier, etc., Milwaukee, Wis. ....(P. & S.)	8-18
9 15*	Dredging, Bridgeport, Conn..(S)	8-18
9-16*	Lock and dam, Wheeling, W. Va. ....(S)	8-18
9-16*	Lock, guide walls, etc., Wheeling, W. Va....(S)	8-18
9-19*	Dredging, Galveston, Tex....(S)	8-25
9-19	Dredging, Norfolk, Va.......(S)	8-25
9-19*	Riprap jetties, Portland, Me..(S)	8-25
9-20	Dredging, Norfolk, Va.......(S)	8-25
9-23*	Dredging, Mobile, Ala	8-25
10- 1*	Power plant, Annapolis, Md.(S.)	8-25

CURRENT PRICES OF ENGINEERING MATERIALS

Supplement to ENGINEERING NEWS, appearing in the First Issue of Each Month. New York, September 1, 1910.

PRICE CHANGES AND THE BUSINESS OUTLOOK.

From many quarters complaints are received that the volume of business is less than three months ago. These complaints relate especially to those lines of trade dealing directly with the purchasing departments of the railways, but aside from this, the total amount of business transacted shows only a slight restriction compared with last year. The returns from agriculture will be more satisfactory than was feared earlier in the year, but with this there is a spirit of conservatism among jobbers, merchants and consumers, which may tend to lower the total volume of trade. Price changes have been few, and these of minor importance. Pig iron is selling at about 50 cts. a ton cheaper in the North, but in the South slightly higher prices have been recorded.

The metal industry is disappointing, yet the consumption of copper, from domestic and foreign sources, is as large as at any time this year. The production is probably more nearly balanced to consumption than last month. A larger volume of business is being transacted in the minor metals. Pig tin prices have advanced rapidly, due to a shortage of the supply and an increase in consumption.

The labor situation is more satisfactory to employers. In New York City, only the better mechanics in the building trades can secure employment. All over the country machinists and apprentices of limited skill are seeking employment. Considerable difficulty is experienced, however, in securing thoroughly competent machinists, molders and factory workers. The tendency to strike has not been as noticeable as last month, mainly because business is being transacted at less pressure.

The railways of the country have not been making additions to their existing facilities the way they had planned, and much improvement work, especially for new yards and terminals, has been postponed. One large Eastern railway is endeavoring to complete its work as rapidly as possible, and has started some additional construction. The Baltimore & Ohio has let some important contracts for improvements and additional rolling stock, and a Southern railway is pushing its double-tracking project. Many lines have needed improvements to make, but are unable to do so on account of inability to secure the necessary funds. One of the stable roads in the Northwest has materially cut down its passenger service on account of decreased receipts and increased expenditure.

The proposed advance of freight rates will not be granted unless more proof is shown than has been brought forward.

A slight improvement in the market for good securities is noticed. This is shown in the sale of $2,243,000 canal bonds of the State of New York, August 16, at a price of 101.77. These bonds were the unsold portion of $11,000,000 offered July 11. A few railways have been able to dispose of bonds and some municipal offerings held up earlier in the year are now being taken. The market for electric railway, light and power development and irrigation project securities is limited. Bonds for the extension of existing water-works are in most cases being taken as offered.

A number of contracts for small work are being placed, but building construction is falling off in many parts of the country. Few new manufacturing plants are being built. Additions are being made to a number of existing plants. Government work is more active, and many specifications are being sent out.

The decreasing number of idle freight cars is usual at this time of the year.

LABOR.

Small strikes have been far more prevalent during August than any time this year. In most cases the workers have been pacified by granting slight increases in wages, but in a few conspicuous instances the companies have resisted the advances, and in some cases have done so successfully. The supply of men willing to work seems to be larger than earlier in the year, and this has been quite a potent factor for the employers. On the other hand, there are noteworthy cases where the men not only have been denied increases that they were rightfully due, but the companies have broken faith with their employees. This has happened in several isolated cases. The striking trainmen on the Grand Trunk lines returned to work, and will have an increased compensation, but several of their demands were refused. A particularly bitter car strike is going on in Columbus, Ohio, and in New York City there is a strike of a good deal of magnitude in the clothing trades.

The New York Central, one of the largest employers of common labor in the East, has, according to reports, raised the wages of some of its outside men to $1.75. Italian labor can command $1.75 on almost any kind of construction work, and other contract labor is obtainable at $1.60.

Good machinists are not plentiful, but there is an excess in the supply of lathe hands and young men who have been taught to do one or two simple operations in a machine shop. Good moulders are scarce, but there is an oversupply of incompetent men, particularly on cast iron.

Sheet-metal workers in New York City have secured an advance of 25 cents a day, and will have another raise of 25 cents later in the year. This brings their wages up to $5.50 a day, being among the highest paid mechanics in the building trades in New York.

The steerage passengers arriving at the port of New York from Jan. 1 to Aug. 20 numbered 727,771, compared with 637,909 during the corresponding time last year.

CEMENT, LIME AND BRICK.

PORTLAND CEMENT.—From many points of view the cement trade is in a more satisfactory condition than at any time this year. Consumers are specifying freely on old contracts, and in the East the new business booked is at the advanced prices. Some of the smaller companoes sold more than their capacity early in the year, and in consequence are seeking to buy from the larger manufacturers, but there is no likelihood of any shortage developing anywhere save in the Southwestern territory. The productive capacity, especially in the East, is larger than needed, and with the building of new mills in the West it takes just so much business from the Eastern manufacturers. Hence the likelihood of even more capacity in the future.

Manufacturers are somewhat disturbed because the present agreement regarding prices and territory will have to be renewed in the near future, and no very aggressive steps have been taken to do so. Whether this means that there is likely to be a period of demoralization in the cement industry or not, is the subject of not a little controversy, but seemingly from many indications it would lead to the belief that the manufacture of cement cannot, under existing conditions, be carried on at a much smaller margin. In fact, with the great difficulty of securing laborers for the cement mills and the increasing cost of manufacture, it is doubtful whether prices ruling early this year afforded any fair margin of profit. Much rumor is heard that a very strong financial interest may effect a consolidation of some of the larger cement companies.

Prices are unchanged at $1.53 per bbl. in New York, $1.50 in Philadelphia and $1.60 in Buffalo.

Imported cement continues at the unchanged price of $2.42 for Alsen's and $2.43 for Dyckerhoff's.

NATURAL CEMENT.—The market is quiet, and the manufacturers are able to supply the demand promptly. Old contracts have been specified on more freely during the last month. Prices continue unchanged at 80 cts. per bbl.

LIME.—The demand is better, and hydrated lime shows considerable improvement. The companies that manufacture finished plaster decorations report active business.

Prices continue unchanged from last month. For large lots delivered in New York City, quotations are as follows: State common, per bbl., 75 cts.; Rockland-Rockport, common, 92 cts.; Rockland-Rockport special, 320 lbs., $1.47; select finish, 350 lbs., net, $1.60; New Milford, $1.30.

Hydrated lime for brick work is $8.50 per ton; for finishing, $9.00 per ton is asked. These prices are for carload lots.

Adamant wall plaster is $6.00 per ton, delivered at the work.

BRICK.—The market is easier, and there is a good deal of brick in the vicinity of New York that has not been sold. It is evident that the market is overstocked, and more than that, there is considerably more brick producing capacity in the territory tributory to New York City than there is demand for. It is a peculiar fact, while the makers of common brick had an unsatisfactory season, the makers of pressed brick or front brick report business much better. One reason for this is probably the increasing use of hollow wall tile, and then, too, the falling off in building operations in the vicinity of New York must be taken into consideration.

Prices on Hudson River and Raritan River common are the same at $5.12½ to $5.37½ per thousand; light hard brick can be had from 75 cts. to $1.00 cheaper.

In Boston the price is unchanged at $7.00, and the same figure is quoted in Chicago.

White enameled brick are moving freely at the unchanged price of $60 per thousand for the American size (8¾ × 2¼ in. enameled surface by 4⅛-in. bed), and $70 to $75 for the English size (9 × 3-in. enameled surface by 4½-in. bed). These prices are f. o. b. Perth Amboy.

PLASTER BLOCKS.—For large lots prices are as follows:

	Weight lbs. per sq. ft.	Price cts. per sq. ft.
2-in....................	7	6
3-in....................	8½	6½
4-in....................	11	7¼

These blocks are made 32-in. long by 13½-in. wide, containing 3 sq. ft. of surface. The 2-in. blocks are solid, but the others are hollow.

Plaster boards ⅝-in. thick are 16 cts. per sq. yd.

STONE.

BLUESTONE.—Contractors are urging delivery of bluestone, but it is evident that the amount of work required in and about New York during the season will not be large. In curbing, the demand has been very limited. In the line of sewer bottoms and flagging, however, the demand has been fair.

Prices are without change from those of last month; for delivery, either alongside of dock or f. o. b. cars, New York City, are as follows: Flagging, 6 cts. per sq. ft. per in. of thickness; flagging, 2½ to 3-in. thick that will pass New York City specifications, 18 to 19 cts. per sq. ft. Some concessions, however, have been made and stone of this character has sold at 17 cts.

Sewer bottoms 5 ft. sq. and 3-in. thick are sold at 25 cts. per sq. ft. Curbing, 5 x 16-in., is 35 cts. and 5 × 24-in. by 5-in. thick is 60 cts., and 6-in. thick is 72 cts. per lin. ft.

Promiscuous shapes of building and foundation stone sell at 70 to 74 cts. per sq. ft.

GRANITE.—Building work has fallen off to quite a degree, and the demand for granite is limited. Prices continue unchanged at 40 to 45 cts. per cu. ft. for promiscuous shapes or run of quarry.

Pink Milford granite is $1.00 per cu. ft. for promiscuous shapes.

LIMESTONE.—The demand is light, and prices are unchanged at 85 cts. per cu. ft., delivered alongside of dock, New York. Dressed stone is quoted at $1.25 to $1.50 per cu. ft.

Sandstone in the rough is 80 cts. to $1.00 per cu. ft.

INTERIOR STONE.—The demand has fallen off to quite a degree. Slate flooring, 1-in. thick, can be had at 20 cts. per sq. ft. for the common or ribbon variety. Clear black sells at 35 to 40 cts., and the same price is asked for Vermont. A combination of slate and marble flooring is 30 cts. per sq. ft.

Marble floor, finished ready to lay, of Vermont marble is 50 to 70 cts. per sq. ft.; Italian marble, 70 to 90 cts. Tennessee marble can be had at 65 cts. Ordinary stair work, such as slate steps, are quoted at 24 cts. per sq. ft.

CRUSHED STONE, SAND AND GRAVEL.

CRUSHED STONE.—A few of the dealers selling stone in the vicinity of New York have had excellent business, due to specifications being received on old contracts. This was not so much new business, as it was simply orders placed against contracts taken several months ago. Other dealers report considerable unevenness in the trade. Prices are without material change, although in some instances where there has been sharp competition the following quotations have been shaded to the extent of 5 cts. a yd.: For 1½-in. stone, 90 cts. to $1.00 a yd. is quoted; ¾-in. stone, 95 cts. to $1.10, and screenings are also sold at 95 cts. to $1.10. These prices are for full cargo lots of 500 cu. yds. delivered alongside of dock, New York City.

SAND.—In spite of the falling off in the building trades, sand continues quite active. The high record made in July, however, was not maintained during August. Prices continue without change, standard grades of Long Island washed sand being quoted at 35 cts. per cu. yd., delivered alongside of dock. White quartz sand is 58 to 62 cts. per cu. yd, and white quartz grit, 75 cts. per cu. yd.

GRAVEL.—The contractors for the Brooklyn subway are now calling for deliveries, and this is one reason why a leading seller of gravel has refused to make some new contracts this month. The demand is excellent, and owing to the large contracts made earlier in the year, shipments are especially large.

Prices are firm, with an upward tendency. For best grades of washed gravel, 80 to 85 cts. per cu. yd. is quoted for full cargo lots of 500 cu. yds., delivered alongside of dock, New York. White quartz roofing gravel is $1.25 to $1.35 per net ton.

PRODUCTION OF SAND AND GRAVEL IN THE UNITED STATES.—More than $18,000,000 worth of sand and gravel was dug out for sale in the United States in 1909, according to a report just issued by the Geological Survey. This value exceeded by over $4,700,000 the value of the product in 1908. The production in 1908 was 37,216,044 short tons; that of 1909 was 58,027,025 short tons. The values for the two years were $13,270,032 and $18,040,536.

The average value of building sand during the year was about 31 cts. a short ton; the average value of gravel was 25 cts. Much sand is sold by the cubic yard, which weighs from 2,300 to 3,000 pounds.

IRON AND STEEL.

PIG IRON.—Less iron was sold during August than July. In many ways it was the dullest month of the year, and several blast furnace interests withdrew from the market, blowing out their stacks. Prices receded only slightly, and it is evident that the market is near bottom unless there should be a radical change. Prevailing prices are between $2 and $3 a ton lower than those ruling a year ago. Southern foundry No. 2, in Cincinnati, a representative grade, in a highly competitive market, is as low, if not lower, than any time since 1905. It is evident that with the higher prices of ore, increased the cost of blast furnace labor, fuel and other supplies; manufacturers are not getting a new dollar back for an old one. The figures published by the U. S. Steel Corporation showing the amount of unfilled orders on hand August 1 were rather favorable, the figures being less than anticipated. It is evident, however, that these figures are not going to have the value they were expected to, for, unaccompanied by any satement of earnings, they give no index to the rate of production. If this interest should choose to give to the public figures representing the orders received during the month, there would be a better basis for comparison; as it is, the statistics published by the leading trade authority on the production of iron seems to answer the purpose with considerable satisfaction. A matter of much interest was a circular letter sent out by Hickman Williams & Co., New York, sellers of pig iron in which a number of questions were asked the foundry trade, with a view to comparing existing conditions with those of the active period prior to 1907. The firm received something over 700 replies, and the majority of answers attributing the present depression in the pig iron market to an overproduction of iron. The remedy suggested in another question was the production should be cut down, but a number suggested that a period of rest would bring about the desired result. Compared with the boom period of 1907, more than one-third of the foundrymen stated that business was better; slightly less than one-third stated the business was the same, and the remainder found business worse. On the whole, there was indicated a net increase of 12% in the amount of pig iron melted.

Consumers of iron are not disposed to buy for forward delivery, reasoning that with the large capacity out of blast there is little likelihood of rapid advance in price. Then, too, it must be remembered that there was heavy buying of iron late in July.

Prices show a decline of 25 to 50 cts. per ton compared with last month. The following quotations are for lots of 100 gross tons and over f. o. b. the points named: Cincinnati, Southern foundry No. 1, $14.75 to $15.25; Southern foundry No. 2, $14.25 to $14.75; Southern foundry No. 4, $13.50 to $14. In Philadelphia Eastern Pennsylvania No. 2 X foundry is $16 to $16.25; Eastern Pennsylvania No. 2 plain, foundry, is $15.75 to $16. In Chicago Northern foundry No. 2 is $16.50 to $17.; Southern Foundry No. 2 is $15.35 to $15.85. In Pittsburg, Bessemer iron is $16.15 and basic $14.90, including the 90-ct. freight rate from the valley. In New York No. 2 X Northern foundry is $15.50 to $16; No. 2 Southern foundry, $15.25 to $15.75. In Birmingham, No. 2 Southern can be had at $11; for prompt shipment; for delivery during the last half of the year $11.50 is asked.

STEEL RAILS.—Considerable commotion prevailed in a public press early in the month regarding a sale of 20,000 tons of standard rails at $26.50. This has been authoritatively denied, and more than that, it has been denied in such a way as to leave little doubt that there was any such a sale made. It is true that business has been taken for foreign shipment at less than $28, but the prevailing price, which has ruled at $28 since early in 1901, continues. This is not especially low when it is considered that steel products are selling in proportion; Bessemer billets at $24.50. Some business has been taken for a Mexican road and several specifications have been received for light rails.

Quotations are without change, the following prices being named for lots of 500 tons and over, carload lots being held at 50 cts. a ton additional; these quotations are f. o. b. mill: Standard sections, 50 to 100-lb., $28; 40 to 45-lb., $27; 30 to 35-lb., $27.50 to $28.50; 20 to 25-lb., $27.25 to $28.25; 12 to 14-lb., $29; 8 to 10-lb., $32. Relaying rails can be had cheaper at $20 to $21 in New York, but in Chicago are $24 to $25.

TRACK SUPPLIES.—The demand is light, although some of the Eastern lines have been doing more construction work in the last month than any time this year. There is quite a little repair work going on in the West, but railway managers are not disposed to advertise the fact.

Prices are as follows: Standard railway spikes, 4½ × 9/16 in. and larger, are 1.50 to 1.60 cts. per lb. Boat spikes and small railway spikes are 1.60 to 1.65 cts. Track bolts with square nuts are 2.40 to 2.50 cts. per lb. and angle bars, 1.50 to 1.65 cts. per lb. in Chicago and Pittsburg.

STRUCTURAL SHAPES.—The volume of business booked by the leading fabricators is considerably less than that placed earlier in the year. There is a great deal of competition too for new business. One thing, however, that stands out prominently is a number of orders calling for small tonnages, which in themselves are too insignificant to report, but in the aggregate they make up considerable business. Contracts awarded during the month include orders for several bridges in Oregon and the Northwest, a peculiar feature of this business being the stipulation that the material should be shipped without any undue delay. An order for a bridge over the Connecticut River calling for 2,000 tons was placed; the Pennsylvania R. R. awarded contract for a 1,400-ton structure over the Schuylkill; mill buildings have taken considerable tonnage; the Pennsylvania Lines west are in the market for about 1,600 tons of material, and the Lake Shore calls for 900 tons. A New York building will require 3,000 tons and a new wharf about 2,000 tons. A light highway bridge over the St. Johns River is also to be figured on. The Quebec job, calling for 65,000 tons of steel, has been readvertised and bids will be received Oct. 1.

Prices are without change. The following quotations are named in cts. per lb. f. o. b. Pittsburg: I-beams and channels, 3 to 15-in., 1.40 to 1.45 cts.; over 15-in., 1.55 cts. H-beams, over 8-in., 1.65; angles, 3 to 6-in. inclusive, 1.50 cts.; angles over 6-in., 1.55 cts.; zees, 3-in. and over, 1.50 cts.; angles, channels and zees under 3-in., 1.45 base and full extras; deck beams, and bulb angles, 1.75 cts.; hand rail tees, checkered and corrugated plates, 2.75.

Chicago store prices in cents per lb. are as follows: Angles, 3 to 6-in., 1.80 to 1.90 cts.; over 6-in., 1.90 to 2 cts.; I-beams and channels, 1.80 to 1.90 cts. In San Francisco prices from store continue without change at 2.70 cts. base.

OLD MATERIAL.—Cast scrap has been in better demand during the last month, but steel scrap has gone from bad to worse, and some of the tenders sent out by the large railways were so unsatisfactory that they decided not to dispose of the material. One reason why the scrap market is so unsatisfactory is because there seems to be an association of rolling mills who will not buy except at marked concession, and this association is the only outlet for Eastern scrap. In New York and vicinity prices are as follows per gross ton: Re-rolling rails, $12 to $12.50; heavy melting steel scrap, $11 to $12.25; No. 1 railroad wrought, $13 to $13.50; No. 1 yard wrought, $11.50 to $12; pipes and flues, $11.50 to $12; cast borings, $7 to $7.50; machinery cast, broken up, $11.50 to $12; stave plate, $9 to $9.50.

In Chicago the principal lines of scrap are now lower than any time in several years, except for a short time in 1908, and also in 1909. Stocks are reported light, so should any demand spring up prices might advance. The following quotations are per gross ton: Re-rolling rails, $15.25 to $15.75; heavy melting steel scrap, $12.25 to $12.75; shoveling steel, $11.75 to $12.25. For such materials as are sold by the net ton, prices are as follows: Miscellaneous railroad wrought, $11 to $12.50; machine shop turnings, $7 to $7.50; cast and mixed borings, $4.75 to $5.25; No. 1 cast scrap, $12.75 to $13.25; pipes and flues, $9.25 to $9.75; railroad malleable, $11 to $11.50; agricultural malleable, $10.50 to $11.

In the Pittsburg market the demand is limited, and the prices are more or less nominal. Quotations per gross ton are as follows: Re-rolling rails, $15.75 to $16; No. 1 foundry cast, $14 to $14.25; No. 2 foundry cast, $13 to $13.25; old grate bars, $10.75 to $11; old car wheels, $14 to $14.50; cast borings, $7.50 to $7.75; machine shop borings, $9.25 to $9.50; bundled steel scrap, $9.75 to $10.

CAST IRON PIPE.—The demand is good, especially from small municipalities, and numerous orders are in the market on which shipments are being urged. The prolonged dry season has had the effect of extensions being planned for numerous systems, and manufacturers of water pipe are looking for considerable business this Fall or early in the Spring. One of the largest jobs is an 80-mile gas pipe line from Fayette, Miss., to Birmingham. Cheyenne, Wyo., purchased 3,400 tons; Gladsten, Ala., has contracted for 5,000 tons. Bids will be received Sept. 12 for both cast-iron and steel pipe for Portland, Me. This will call for about 22,000 tons.

Prices are as follows per net ton at the points named: Birmingham, Ala., 4 to 6-in., $23; 8 to 12-in., $22; over 12-in., $21. In Chicago: 4-in. is $28; 6 to 12-in., $27; 16-in. and larger, $26.

In New York, 6-in. is quoted at $23.50 to $24.

Gas pipe is held at $1 per ton advance in all markets.

Specials are $50 to $60 per net ton.

PLATES.—Deliveries to consumers are large, but for the greater part of the month new orders received by plate manufacturers from car builders were not equal to the shipments being made on old contracts. This has improved somewhat lately, but the car builders themselves are finding work less active.

There was a period of nearly a month when there was practically no orders received. Since the middle of August, however, quite a little more work has come up, but there is no special activity. The ship building trade is very quiet, and there is no prospect of any new boats being laid down for the Lake trade for some time to come, the shipping capacity on the Lake being larger than the business offered. There is a large pipe contract for Portland, Me., bids for which will be opened Sept. 12th, for which either steel pipe or cast-iron pipe may be used. Should this be decided in favor of the steel pipe, about 16,000 tons will be required. The Standard Oil Company is planning to build storage tanks at several points in California. Whether these orders can be secured by American manufacturers or not, is a question.

Prices are unchanged as follows: f. o. b. mill, in cts. per lb., ¾-in. thick, 6¼ to 100 ins. wide, 1.40 to 1.45 cts.; ¼ to 3/16 in. thick, 1.50 to 1.55 cts.; 3/16 in. and thinner, including No. 8 gage, 1.55 to 1.65 cts.; Nos. 8, 9 and 10 gage 1.70 to 1.75 cts.

In Chicago store prices are 1.85 to 1.95 cts.

STEEL CASTINGS.—Business is less active than early in the Summer. Open-hearth castings, weighing from 100 to 500 lbs., are 3½ to 5 cts. per lb. Crucible castings, weighing from 100 to 500 lbs., are 7½ to 9 cts. per lb.

RIVETS.—Business is quiet. The orders from fabricators and from car manufacturers are light. For the present there is no prospect of any improvement. Prices are as follows:

Structural rivets, ¾-in. and larger, 2.15 cts., base cone head boiler rivets, ¾-in. and larger, 2.25 cts., base; ⅝-in. and 11/16-in. take an advance of 15 cts., and ½-in. and 9/16-in. take an advance of 50 cts. Lengths shorter than 1-in. also take an advance of 50 cts. Terms are 30 days, net cash, f. o. b. mill.

PILING, SHEET STEEL.—Some of the leading manufacturers of sheet steel piling report that the price of 1.60 cts. per lb., f. o. b. mill Pittsburg, is bottom, and that as far as they are concerned no piling is sold below that figure. The quotation made last month is therefore revised to 1.60 cts. per lb. f. o. b. mill Pittsburg.

CASTINGS, GREY IRON.—Business has fallen off. As far as building castings are concerned, there is little activity. It may be that this complaint is due to the fact that more foundries are now engaged in making building castings than before, while building operations show a decrease, there is an increase in the use of cast iron in ordinary mill building construction. Columns are sold at 1.75 to 2 cts. per lb. Desirable orders can be placed at concessions from these figures. Stair work is 2 to 2.25 cts. per lb. Rough castings, such as sewer work, manhole covers, and castings of considerable weight, are 1.50 to 1.75 cts. per lb.

ROOFING, CORRUGATED.—There is a fairly active demand for corrugated sheets, but in many cases prices are shaded from $4 to $5 per ton. These concessions, however, can only be secured on particularly desirable orders.

Quotations are unchanged from last month, and for 100 sq. ft. of roof surface are as follows: Carloads, Pittsburg, No. 28 painted, $1.70; No. 28 galvanized, $3. From store, New York, No. 24 painted, $3.85; galvanized, $4.80; No. 26 painted, $2.95; galvanized, $4; No. 28 painted, $2.06; galvanized, $3.75.

FREIGHT RATES.—The freight rates, on finished steel products, from the Pittsburg district, including plates, structural shapes, merchant steel and iron bars, pipe, fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows, in cts. per 100 lbs.: Albany, 16; Buffalo, 11; Boston, 18; Baltimore, 14½; Canandaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

TIN PLATE.—The mills are behind in deliveries and the present rate of productions promises to continue as most of the manufacturers have orders booked for some weeks ahead. In some instances, premiums of 15 cts. a box are paid for prompt shipments of small lots of coke plates.

Terne plates or tin plates used for roofing purposes are sold by the box of 112 sheets. Store prices in New York are without change at $8.50 per box for 20 × 28-in. I C plates with an 8-lb. coating; plates of the same size with a 15-lb. coating are $10.40; 20-lb. coating, $13 and 40-lb. coating, $16.50.

COKE.—The production of coke is slightly larger than it was July 1, yet it is claimed the production and shipments are practically even. This is evidently true for the price of coke for prompt shipment is slightly higher than last month. The production is, according to the "Connellsville Courier," 406,505 tons weekly in the upper and lower Connellsville region. The best grades of furnace coke, running under 1% in sulphur, are sold at $1.75 to $1.85 per ton at oven, on contracts running throughout the year. Coke for immediate shipment can be had at $1.65 to $1.70. Foundry coke is unchanged in price, the best grades of 72-hr. foundry being obtainable at $2.15 to $2.25 for prompt shipment, and $2.25 to $2.50 for delivery throughout the year.

NAILS.—Stocks are low. The mills report a fair run of small orders. Most of these orders are for prompt shipment.

Prices are unchanged and per keg of 100 lbs. at Pittsburg are as follows: In carload lots to jobber, $1.70; to retailers, $1.75; less than carloads to jobbers, $1.75; to retailers, $1.85. Small lots are sold from New York store at $2.05 for wire nails and cut nails at the same figure. In Pittsburg cut nails are quoted at $1.70 base.

WIRE ROPE.—The demand for wire rope has fallen off to quite an extent, but prices are unchanged from last month. The discount to the larger trade being 42½ and 5% from list for galvanized, and 50 and 5% from list for bright. The net prices of bright wire rope are as follows:

Diameter, inches.	Price per foot Cast steel.	 Crucible steel.	 Plow steel.
2¾	$1.05	$1.24	$1.46
2½	.85	1.05	1.22
2	.57	.65	.76
1¾	.44	.54	.64
1½	.32	.39	.45
1¼	.23	.28	.32
1	.15	.18	.21
¾	.10	.11	.13
⅝	.07	.09	.10
½	.06	.07	.07

SHEETS.—Although there is a great deal of shading done in the price of sheets, in some cases amounting to $5 a ton, there has been no change in the official prices. The following prices can be shaded to some extent.

Prices of mill shipments of carload lots are as follows:

	Cts. per lb. Black.	 Galvanized.
Nos. 3 to 8	1.70	....
Nos. 9 and 10	1.75	....
Nos. 11 and 12	1.80	....
Nos. 13 and 14	1.85	2.50
Nos. 15 and 16	1.95	2.60
Nos. 17 to 21	2.10	2.75
Nos. 22 and 24	2.15	2.90
Nos. 25 and 26	2.20	3.10
No. 27	2.25	3.20
No. 28	2.30	3.40

Store prices Chicago are as follows:

	Cts. per lb. Black.	 Galvanized.
No. 10	2.30	3.25
No. 12	2.35	
No. 14	2.40	
No. 16	2.50	3.35
Nos. 18 and 20	2.85	3.40
Nos. 22 and 24	2.90	3.55
No. 26	2.95	3.70
No. 27	3.00	3.95
No. 28	3.10	4.15
No. 30	3.30	4.55

WIRE.—There seems to be a considerable demand for woven wire fencing, and barb wire is moving in a fairly large volume. The heavy consuming season is over, but it is possible that there may be considerable wire used later this year.

The wire trade has held up surprisingly well. Prices are as follows: Carloads, annealed, $1.55; galvanized, $1.85; less than carload lots are held at an advance of 10 cts. per 100 lb. over these prices. Barbed wire in carload lots is $1.75 for the painted and $2.05 for the galvanized. This is also held at 10 cts. advance for less than carload lots. All of these prices are per 100 lbs.

MERCHANT PIPE.—An order for 18 miles of 16-in. pipe has been placed with the leading interest and another order for 5 miles of 12-in. pipe has been taken by an independent manufacturer. The Arkansas Natural Gas Company has placed an order for 7 miles of 10-in. pipe. New orders are light, but there are sufficient orders on the books of manufacturers to keep prices steady.

Discounts which were in effect last month are repeated as follows: ¾ to 6-in. black, 78%; ¾ to 6-in., galvanized, 68%; 7 to 12-in. black, 72%; 7 to 12-in. galvanized, 57%. At these discounts the net prices of pipe per foot, are as follows:

	Steel Pipe in Cts. per ft. f. o. b. Mill. Black.	 Galvanized.
¾-inch	2.53	3.68
1 -inch	3.63	5.28
1¼-inch	4.95	7.20
1½-inch	5.94	8.64
2 -inch	7.92	11.52
2½-inch	12.67	18.30
3 -inch	16.61	24.16
4 -inch	23.76	34.56
5 -inch	32.90	46.30
6 -inch	42.36	60.16
7 -inch	65.80	101.05
8 -inch	70.00	107.50
9 -inch	95.20	146.20
10 -inch	112.00	172.00
11 -inch	126.00	193.50
12 -inch	137.20	210.70

BARS AND MERCHANT SHAPES.—The volume of business continues fair, mainly because many consumers prefer to buy small lots from store rather than load up with a large stock at even lower figures. Prices are without change as follows:

	Cts. per lb.
1 to 1⅞-in. round and square.	1.90
1½ to 4-in. × ⅜ to 1-in	1.90
1½ to 4-in. × ¼ to 5/16-in	2.10
Rods—⅝ and 11/16 round & square	2.10
Angles:	
3-in. × ¼-in. and larger	2.10
3-in. × 3/16-in. and ⅛-in	2.35
1½ to 2½-in. × ⅛-in	2.35
1½ to 2¾-in. × 3/16-in. & thicker	2.10
1 to 1¼ × 3/16-in	2.20
⅞ × ⅛-in	2.40
¾ × ⅛-in	2.50
⅝ × ⅛-in	3.55
½ × 3/32-in	4.35
Tees:	
1-in.	2.65
1¼-in.	2.45
1½ × 2½ × ¼-in	2.15
1½ × 2½ × 3/16-in	2.35
3-in. and larger	2.15
Beams	2.10
Channels, 3-in. and larger	2.10
Bands—1½ to 6 × 3/16 to No. 8	2.35
Norway bars	3.60
Bessemer Machinery, Steel	1.90
Cast steel, base	7.00
Special cast steel, base	14.00 to 15.00

SWEDISH STEEL.—Considerable activity is noted in the demand for Swedish steel, and some of the importers report a particularly brisk demand for drill steel. Material from Sweden is coming in rapidly and shipments are being made promptly by selling agents in America.

Prices are without change. Drill steel, either round, hexagonal or octagon, is [illegible] per lb. for all sizes ⅝ to 2 ins. For sizes 2⅛ to 3 ins. 7 cts. is quoted and 3⅛ to 4 ins., is 7½ cts.

Hollow drill rod is held at 12½ to 15 [illegible] for the imported.

Anvils of Swedish steel are held at [illegible] 9½ cts. per lb. They weigh from 80 to [illegible] lbs.

SWITCH POINTS.—The demand is fair. The following prices are named f. o. b. mill for switch points in lots of ten or less pair: For 60-lb. rail, 10-ft. points, $1[illegible]; 15-ft. points, $2.50 for 70-lb. rail, 10-ft. points, $18; 15-ft. points, $25; for [illegible] rail, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, 15-ft. points, $3[illegible]; for 100-lb. rail, $33.50. All of the above are furnished with three rods, except 10-ft. points for 60 or 70-lb. rail, which have only two.

LAG SCREWS.—Quotations are without change. Cone point lag screws are sold at a discount of 75 and 10% from list. [illegible] prices are as follows:

	Net price per 100 ¼-inch.	 ¾-inch.	 1-inch.
3½-inch	$1.17	$2.40	$5.[illegible]
4 -inch	1.25	2.55	5.2[illegible]
4½-inch	1.33	2.70	5.[illegible]
5 -inch	1.40	2.85	5.8[illegible]
6 -inch	1.58	3.20	6.4[illegible]
7 -inch	1.73	3.50	7.0[illegible]
8 -inch	1.82	3.85	7.6[illegible]
9 -inch	2.05	4.10	8.2[illegible]
10 -inch	2.25	4.45	8.7[illegible]
11 -inch	2.40	4.70	8.3[illegible]
12 -inch	2.60	5.00	9.9[illegible]

CHAIN.—The following quotations are named on chain. The volume of business is less than normal and prompt shipments can be made.

Prices are without change per 100 lbs. f. o. b. Pittsburg, as follows:

Sizes in inches.	Proof.	BB.	BBB.
3-16	$8.25	$9.50	$10.00
¼	5.70	6.95	7.45
5-16	4.70	5.95	6.45
⅜	4.15	5.40	5.90
7-16	3.85	5.10	5.60
½ and 9-16	3.65	4.90	5.40
⅝	3.55	4.80	5.30
¾	3.45	4.70	5.20
⅞	3.35	4.60	5.10
1	3.25	4.50	5.00
1¼ and 1⅛	3.35	4.60	5.10

Hand-Made Chain.

Size in inches.	BBB crane chain.	BBB crane, dredge hoisting or steam shovel hoisting chain.	Special "Warwick" crane, hoisting steam shovel hoisting and dredge hoisting chain.	Special "Trident" crane, steam shovel hoisting & dredge hoisting chain.
⅝	$7.95	$8.20	$9.15	$9.15
¾	7.15	7.45	8.45	8.45
⅞	7.67	6.90	7.95	....
1	6.15	6.40	7.45	....
1⅛	5.75	5.95	6.90	....
1¼	5.65	5.90	6.85	....
1⅜ to 1⅞	5.55	5.75	6.80	....

SPIRAL RIVETED PIPE.—Prices continue unchanged from the last report. The prices given below are f. o. b. factory, freight equalized, with New York City being figured at a discount of 50, 10 and 10% from list. They are for orders amounting to about $250. For large orders, of several carloads, prices are from 12½% to 20% cheaper.

Diameter in ins.	*Thickness of steel, Birmingham wire gage.	Net price per 100 ft. With bolted joints complete. Plain.	 Asphalted.	 Galvanized.
3	20	$21.80	$14.21	$20.70
4	18	19.76	21.48	30.74
5	18	23.49	25.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	54.10	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.32
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.89	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	226.44
20	12	183.79	193.30	248.39
22	12	200.48	210.64	269.21
24	12	219.92	231.07	293.99
26	10	280.26	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	339.15	430.64

*Made in both lighter and heavier gages at corresponding differences in price.

BOLTS.—Prices are without change. The discount on common carriage bolts, to the retail trade and large consumers, is 70 and 7½% from list, on bolts ⅜ × 6 ins., and smaller. The lower price is 65 and 5% discount for larger and longer bolts. Net prices are as follows:

Length in inches.	Diameter in inches—Net price per 100. ⅜	 ½	 ¾
4	$0.74	$1.22	$2.86
5	0.83	1.36	3.15
6	0.92	1.52	3.50
7	1.22	1.65	3.75
8	1.34	1.80	4.25
9	1.45	1.95	4.50
10	1.55	2.20	4.75
12	1.75	2.40	5.25
14	1.90	2.70	5.90
15	2.05	2.85	6.25
18	2.40	3.25	7.20
20	2.60	3.50	7.75

FROGS.—For mill shipments, of ten or more, prices are as follows: Bolted frogs No. 7, for 60-lb. rail, $15; for 70-lb. rail, $16.50; for 80-lb. rail, $18; No. 8 frogs for 90-lb. rail, $21; for 100-lb. rail, $23. Plate frogs No. 7, riveted to ⅝-in. plate for 60-lb. rail, $18; for 70-lb. rail, $20; for 80-lb. rail, $21.50. No. 8 frogs bolted to a ¾-in. plate for 90-lb. rail are $25.50; for 100-lb. rail, $27.50.

REINFORCING MATERIALS.

INTERLOCKING PLATES.—For interlocking steel plates, of 24 gage black steel f. o. b. mill central Ohio, the following prices are named:

Length.	Per 100 sq. ft. Weight.	Price Flat Sheets.
Under 4 ft.......	100 lbs.	$11.00
4 to 6 ft.......	160 lbs.	10.00
6 to 8 ft.......	160 lbs.	9.50
8 to 10 ft.......	160 lbs.	9.00
10 ft.......	160 lbs.	8.50

Curved sheets are held at an advance of $1 per 100 sq. ft. over flat.

For a desirable order prices might be shaded about 10%.

TRIANGULAR MESH.—The volume of business continues large. There is still some talk of lower prices being named. For the present, however, quotations continue without change, as follows:

Price per 100 sq. ft.

Style No.	Cross sec. area per ft. width.	Carload lots.	Smaller quantities.
4	.102	$1.03	$1.25
5	.077	.82	.99
6	.058	.65	.78
7	.041	.50	.61
23	.170	1.73	2.08
24	.142	1.48	1.80
25	.124	1.32	1.60
26	.110	1.20	1.45
27	.085	.98	1.19
28	.066	.81	.98
29	.049	.67	.81
31	.261	2.55	3.08
32	.225	2.20	2.67
33	.196	1.96	2.38
34	.146	1.51	1.82
35	.109	1.20	1.45
36	.075	.89	1.07
38	.380	3.62	4.38
39	.325	3.12	3.77
40	.283	2.74	3.30
41	.208	2.08	2.52
42	.151	1.58	1.92
43	.101	1.13	1.36

This material is made in regular widths of 18, 22, 26, 30, 34, 38, 42, 46, 50, 54 and 58 ins. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special length is charged extra.

EXPANDED METAL.—Prices are firm and business is active. The folowing table of prices are for small lots from the warehouse, either New York or Pittsburg. Material concessions, however, will be made for large orders.

Mesh, ins.	Gage (Stubs).	Section in sq. in. per ft. width.	Weight, in lbs., per sq. ft.	Size of Standard Sheets in ft.	Price per sq.ft. f.o.b. New York.
½	18	.209	.74	8 × 3 or 6 ft.	5.5
¾	13	.225	.80	6 × 8 or 12 ft.	6.2
1½	13	.207	.70	4 × 8 or 12 ft.	5.5
2	12	.166	.56	5 × 8 or 12 ft.	4.8
3	16	.083	.28	6 × 8 or 12 ft.	2.4
3	10	.148	.50	5.25 × 8 or 12 ft.	2.6
3	10	.178	.60	6 × 8 or 12 ft.	2.8
3	10	.267	.90	4 × 8 or 12 ft.	3.8
3	10	.356	1.20	6 × 8 or 12 ft.	5.
3	6	.400	1.38	3.5 × 8 or 12 ft.	6.2
3	6	.600	2.07	4.66 × 8 or 12 ft.	8.3
4	16	.093	.42	4.5 × 8 or 9 ft.	2.8
6	4	.245	.84	5 × 8 or 12 ft.	3.7
6	4	.368	1.26	5 × 8 or 12 ft.	5.

EXPANDED LATH.—Prices are firm. The price for carload lots given below is f. o. b. mill Central Ohio:

Carload Lots. Price in cts. per sq. yd.

Gage.	Weight per sq. yds.	Black.	Painted.	Galvanized.
27	2¼ lbs.	11½	12¼	17½
26	2½ lbs.	12½	13¼	18½
25	2 lbs.	13½	14¼	19½
24	3.4 lbs.	14½	15¼	20½

Small Lots from New York. Store.
Prices in cents per sq. yd.

Gage.	Black.	Painted.	Galvanized.
27	13	13¾	19
26	14	14¾	20
25	15	15¾	21
24	16	16¾	22

This lath is packed 9 sheets to the bundle.

DIAMOND LATH FROM STORE.

Designation.	Gage.	Weight per sq. yd.	Price. Per sq. yd. Black, cts.
A	24	4 lbs.	20
A Special..........	24	4 lbs.	18
B	27	2.9 lbs.	16½
B Special	27	2.9 lbs.	15
B B	27	2.33 lbs.	14
Square Twist	24	4 lbs.	20
Diamond No. 24...	..	3.75 lbs.	20
" No. 24 Special	..	3 lbs.	16½
" No. 26	..	2.66 lbs.	16½
" No. 26 Special	..	2.1 lbs.	14
Square Twist No. 27	..	2.75 lbs.	14½

BARS, CONCRETE REINFORCING.—Specifications against old contracts are heavy, but new contracts are not being made to any extent. The leading bar mills, however, have plenty of work for the next two months. Bars are quoted on a basis of 1.45 cts. Pittsburg, but this figure has been shaded in some quarters while other sellers are demanding slightly higher figures.

The following prices are based on a quotation of 1.45 cts. Pittsburg:

	Cts. per lb. Plain.	Cts. per lb. *Deformed.
¾-inch and larger..	1.45 to 1.55	1.50 to 1.60
⅝-inch	1.50 to 1.60	1.55 to 1.65
½-inch	1.55 to 1.65	1.60 to 1.70
⅜-inch	1.70 to 1.80	1.75 to 1.85
¼-inch	1.95 to 2.05	2.00 to 2.10

Bar from stock Pittsburg are usually cut to the required length without extra charge. Prices are as follows:

	Cts. per lb. Plain.	Cts. per lb. *Deformed.
¾-inch and larger..	1.65 to 1.75	1.75 to 1.85
⅝-inch	1.70 to 1.80	1.80 to 1.90
½-inch	1.75 to 1.85	1.85 to 1.95
⅜-inch	1.90 to 2.00	2.00 to 2.10
¼-inch	2.15 to 2.25	2.25 to 2.35

*The price of deformed bars varies according to the shape and some are held much higher than these prices.

Twisted bars are held at an advance of 10 to 25 cts. over plain bars.

The base price on plain bars from store, Chicago, is 2 to 2.10 cts.

CLAY PRODUCTS.

SEWER PIPE.—Business is not active, and the season has been quite a disappointment to sellers of tile pipe; especially in the East. It is true there has been a great deal of extension work projected, but much of this has been held up for various reasons.

Discounts continue unchanged. Those applying to the "Eastern List" are as follows: 86% for sizes up to 24-in.; 78% for 27 and 30-in. and 73% for 33 and 36-in. At these discounts the net prices per ft. for carload lots f. o. b. factory, are as follows:

2 & 3-in.......	$0.028	18-in......	$0.267
4-in......	.035	20-in......	.315
5-in......	.042	21-in......	.378
6-in......	.056	22-in......	.42
8-in......	.077	24-in......	.455
9-in......	.091	27-in......	.99
10-in......	.112	30-in......	1.20
12-in......	.14	33-in......	1.70
15-in......	.19	36-in......	1.89

HOLLOW WALL TILE.—An improvement is noted in the volume of orders received from out of town customers. In New York City the building trades are less active and in consequence the amount of business booked here has not been large. It may be said, however, that a wider use is being made of hollow building tile than ever before.

Quotations continue unchanged from last month, and for hollow wall building tile, f. o. b. factory, Perth Amboy, N. J., prices are as follows:

Size.	Price per block, in cts.
4 × 12 × 12-in..............	5.25
6 × 12 × 12-in..............	6.6
8 × 12 × 12-in..............	8.9
10 × 12 × 12-in..............	10.5
12 × 12 × 12-in..............	12.1

Fireproofing partition blocks are unchanged as follows:

Size.	Price per block, in cts.
2 × 12 × 12-in..............	4.4
3 × 12 × 12-in..............	4.4
4 × 12 × 12-in..............	5.
6 × 12 × 12-in..............	6.6
8 × 12 × 12-in..............	8.8

These prices are for what would be considered small orders—approximately carload lots. For quantities which exceed $1,000 worth of material, concessions will be made.

DUCT TELEPHONE.—There has been a good deal of activity in this line, and manufacturers have had an excellent season. There has not been sufficient material, however, to supply the wants of customers promptly.

Prices are steady, and although small lots command 4½ to 5cts. per duct ft. for New York delivery, large orders would be booked at a marked concession from these figures.

ROOFING TILE.—Prices are steady, and continue without change. The best grade of promenade roofing tile in flat blocks for high grade roofs is sold at $20 per M. for run of kiln and $30 per M. for selected. A cheaper form of tile with a smooth face can be had at $10 to $12, but it is not suitable for roof gardens. These prices are for 9 × 9 blocks f. o. b. factory. It requires 258 blocks to lay 100 sq. ft. of roof surface and, in consequence, the price per 100 sq. ft. of roof surface would be $4 to $5 for the smooth blocks; $7.82 for the run of kiln, and $10.73 for the selected.

Vitrified tile, unglazed, of the French or Spanish type, is sold, at approximately $8.50 per 100 sq. ft. of roof surface f. o. b. factory. Glass tiles are sold at 60 cts. each. It requires 183 of these for 100 sq. ft. of roofing.

FLUE LININGS.—Prices continue without change. The discount from list, f. o. b. mill, is 85%, delivered in New York; in small lots, they can be had at 78%. Based on a discount of 85% at the mill net prices are as follows:

	Weight in lbs.	Price per ft.
4½ × 8½-in..............	14	$0.04½
4½ × 13 -in..............	20	.068
4½ × 18 -in..............	40	.15
6 × 12 -in..............	22	.075
7 × 7 -in..............	15	.053
8½ × 8½-in..............	18	.068
8½ × 13 -in..............	28	.098
8½ × 18 -in..............	45	.135
12 × 16 -in..............	45	.15
13 × 13 -in..............	38	.128
13 × 18 -in..............	57	.18
14 × 16 -in..............	60	.165
16 × 16 -in..............	65	.24
16 × 20 -in..............	80	.30
18 × 18 -in..............	75	.30

MILL SUPPLIES.

SHAFTING.—The automobile makers are not specifying as freely on their contracts as earlier in the year. The mills are not especially active, but some specifications are being received from the implement manufacturers. For desirable orders, 55 and 5% discount has been named, although the usual discount for carload lots is 55%. Small lots of less than carloads, but shipped from the mill, are sold at 50% discounts.

The following net prices per foot are based on the 50% discount: ¾-in., 4.15 cts.; 1-in., 7.30 cts.; 1¼-in., 11.50 cts.; 1½-in., 15 cts.; 1¾-in., 20.50 cts.; 2-in., 25.50 cts.; 2¼-in., 38.75 cts.; 2½-in., 41.75 cts.; 2¾-in., 50 cts.; 3-in., 60 cts.; 3½-in., 90 cts.; 4-in., $1.27½; 4½-in., $1.78; 5-in., $2.35; 5½-in., $3; 6-in., $3.85.

CHAIN BELTING.—Prices continue unchanged as follows:

From 3 HP. to 10 HP., 30-in. centers complete, with two sprockets, $7 to $8 per HP.; from 10 HP. to 25 HP., 36-in. centers complete, $5 to $6 per HP.; from 25 HP. to 100 HP., 60-in. centers complete, $4 to $5 per HP.; from 100 HP. to 500 HP., 72-in. centers complete, $3 to $4 per HP.

PACKING.—Prices are without change. The following quotations are for small lots in original packages:

Asbestos wick and rope, 13 cts.; sheet rubber, 11 to 13 cts.; pure gum rubber, 40 to 45 cts.; red sheet, 40 to 50 cts. Cotton packing can be had at 16 to 25 cts.; jute at 3¼ to 3½ cts., and Russian at 9 to 10 cts.

GRAPHITE LUBRICANTS.—Prices continue without change as follows:

Engine flake graphite, 12 cts.; oiled graphite, 20 cts.; car box grease, 8 cts.; gear grease, for electric cars, 4¼ cts.; cup grease, 15 cts.; axle grease, 8½ cts.; automobile graphite grease, 16 cts.

Large consumers and jobbers can obtain considerable concession from these figures.

BELTING.—Trade is not as active as it was earlier in the year. Quotations are unchanged, the discount on rubber belting being 40% from list for the best grade; 40 and 10% for standard and 60 and 10% for competition. Leather belting is likewise without change at 55% discount for extra heavy; 60% heavy; 60 and 10% medium; 60, 10 and 10% light; 70% shoulder, and 70 and 10% for standard.

The following net prices per ft. of rubber belting are computed at the above discounts. The price of leather belting is, as stated, unchanged from last month, and the prices may be found on page 61 of issue Aug. 4.

Width, inches.	2-ply.	4-ply.	6-ply.	8-ply.
3	$0.16	$0.22	$0.33	....
4	.21	.30	.45	....
5	.26	.36	.55	....
6	.30	.44	.65	$0.87
7	.36	.51	.75	1.01
8	.40	.57	.87	1.15
9	.46	.64	.96	1.30
10	.51	.72	1.01	1.44
12	.60	.86	1.30	1.70
14	.72	1.01	1.53	2.01
16	.83	1.17	1.76	2.35
18	.93	1.34	2.00	2.65
20	1.04	1.49	2.25	2.98
22	1.17	1.67	2.50	3.33
24	1.30	1.85	2.76	3.70
26	1.42	2.04	3.06	4.08
28	1.58	2.22	3.33	4.45
30	1.69	2.40	3.60	4.80
34	1.94	2.78	4.16	5.54
38	2.22	3.15	4.70	6.30
42	2.46	3.50	5.30	7.00
46	2.75	3.88	5.80	7.72
50	3.02	4.25	6.40	8.50
56	3.40	4.80	7.20	9.60
60	3.67	5.20	7.80	10.40

HIGH SPEED STEEL.—Manufacturers of steel report an increased demand for good high speed material. It is difficut to trace these orders, but seemingly business is considerably better. Prices vary according to brand, ranging from 50 to 75 cts. per lb.

LUBRICATING OILS.—Business is good from all kinds of consumers. Quotations continue without change; the following figures are named for 5-bbl. lots:

	Cts. per gal.
*Cylinder, dark	20 to 27
*Cylinder, steam, refined........	14 to 22
Neutral Oils, filtered:	
Stainless white, 32 to 34 gravity.	28 to 29
Lemons, 33 to 34 gravity........	17 to 19
Dark, 32 gravity	15 to 18
Crank Case oil	15 to 17

*Prices vary according to test.

COTTON WASTE.—Prices of cotton waste are high and unchanged from last month at 9 to 10 cts. per lb.

FIRE HOSE.—Prices of hose are unchanged.. The standard grade of underwriter's cotton rubber-lined hose, 2⅝-in. diameter, warranted, 350 lbs. pressure is sold, in 50-ft. lengths, complete with couplings, at 65 cts. per ft. Common hose, 2½-in. diameter, tested to 200 lbs. pressure, is 35 cts. per ft.

CHEMICALS.

The following quotations are named for delivery in New York City for lots of fair size:

	Cts. per lb.
Nitric acid, 30°................	3.87½ to 4.25
Nitric acid, 40°................	4.12½ to 4.87½
Sulphuric, 60°	0.90 to 1.00
Sulphuric, 66°	1.00 to 1.25
Sal Ammoniac, lump..............	9.25 to 9.75
Sal Ammoniac, granulated........	5.87½ to 6.00
Sal Ammoniac, gray..............	6.00 to 6.25
Sulphur, roll	1.85 to 2.15
Sulphur, flour	2.00 to 2.40
Sulphur, flowers................	2.20 to 2.60
	Per gallon.
Alcohol, grain, U. S. proof.....	$2.50 to $2.52
Alcohol, denatured, 5-bbl. lots..	.41 to .42
Alcohol, denatured, ½ bbls......	.46 to .47
Alcohol, wood, 95 to 97.........	.50 to .53
Alcohol, wood, purified.........	.80 to ..

GLASS.

SKYLIGHT GLASS.—The demand continues fairly satisfactory, although no large contracts have been placed recently. Prices are without change from the last report as follows:

Thickness, ins.	Price per sq. ft.
1/8	7 cts.
3/16	10 cts.
1/4	15 cts.

Wired skylight glass, ¼-in. thick, is 25 cts. per sq. ft.

WINDOW GLASS.—The price of window glass is without change from the last report at 90% discount from list for all sizes of single and double strength. This discount applies to the jobbers' list of October 1, 1903.

The net prices per box of 50 sq. ft., at the discount named, are as follows:

American Window Glass.

Size of Glass, Ins.	Single Thickness, Price per box, 50 sq. ft. A.	Single Thickness, Price per box, 50 sq. ft. B.
6 × 8 to 10 × 15...	$2.40	$2.20
11 × 14 12 × 13 } to 14 × 20...	2.52	2.40
10 × 26 to 16 × 24...	2.70	2.52
18 × 22 20 × 20 } to 20 × 30...	2.87	2.64
15 × 36 to 24 × 30...	2.96	2.70
26 × 28 to 24 × 36...	3.14	2.79
26 × 34 28 × 32 30 × 30 } to 30 × 40...	3.47	2.94
32 × 38 34 × 36 } to 30 × 50...	4.00	3.46
30 × 52 to 30 × 54...	4.27	3.76

VAULT LIGHTS.—Prices continue without change, contractors furnishing their own molds can obtain glass at from 4 to 5 cts. per lb. Bull's eyes, 3-in. in diameter, are 3 cts. each, and square lights, 3½ × 3½, are 5 to 6 cts. each.

PLATE GLASS.—Business is fairly active, but the manufacturers are able to supply consumers with glass as needed.

The price is unchanged from last month at 85% discount from list.

In the accompanying table the net price of polished plate glass is figured at this discount. These prices apply to the glass only, an extra charge being made for boxing or cutting to special sizes.

NET PRICES OF POLISHED PLATE GLAS S IN DOLLARS.

Length, feet.	Width, Feet 1	1.5	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10
1	$0.24	$0.38	$0.50	$0.66	$0.86	$1.04	$1.18	$1.38	$1.52	$2.40	$2.86	$3.25	$3.75	$4.17
1.5......	....	.59	.86	1.10	1.42	2.10	2.40	2.76	3.08	3.75	4.38	5.00	5.70	6.90
2	....	....	1.18	1.59	2.40	2.86	3.25	3.75	4.17	5.00	5.90	6.85	7.85	8.90
2.5......	....	....	....	2.55	3.08	3.68	4.20	4.70	5.30	6.40	7.60	8.90	10.10	11.10
3	....	....	....	....	3.75	4.40	5.00	5.75	6.90	7.90	9.40	10.70	12.25	13.60
3.5......	....	....	....	....	....	5.20	5.90	6.75	7.60	9.40	11.10	12.70	14.40	15.90
4	....	....	....	....	....	....	6.86	7.90	8.90	10.70	12.70	14.50	16.40	18.20
4.5......	....	....	....	....	....	....	....	9.10	10.10	12.25	14.40	16.40	18.40	20.50
5	....	....	....	....	....	....	....	....	11.10	13.60	15.90	18.20	20.50	27.00
6	....	....	....	....	....	....	....	....	....	18.20	19.00	21.80	25.00	27.80
7	....	....	....	....	....	....	....	....	....	....	22.20	26.00	29.40	32.50
8	....	....	....	....	....	....	....	....	....	....	....	29.70	33.50	37.30
9	....	....	....	....	....	....	....	....	....	....	....	....	38.00	42.00
10	....	....	....	....	....	....	....	....	....	....	....	....	....	47.50
11	4.60	7.20	9.80	12.50	15.00	17.50	20.00	22.60	26.00	30.60	36.20	41.20	47.20	65.00
12	5.00	7.90	10.70	13.60	16.40	19.00	21.80	25.00	28.00	33.50	39.30	44.80	63.50	70.80
13	5.50	8.70	11.80	14.80	17.75	20.80	24.10	27.20	30.10	36.40	43.50	61.50	69.00	112.50
14	5.90	9.40	12.70	15.90	19.00	22.25	26.00	29.20	32.50	39.40	46.70	66.00	109.00	146.30
15	....	....	....	....	....	24.40	28.00	31.30	34.80	42.00	61.80	70.80	141.00	163.50
16	....	....	....	....	....	33.00	37.80	42.50	47.20	55.50	66.00	109.00	157.00	202.00
17	....	....	....	....	....	35.00	40.00	45.30	50.00	60.00	70.30	143.00	192.00	294.00
18	....	....	....	....	....	38.00	42.50	47.80	53.20	63.50	109.00	157.00	280.00	311.00

PAVING MATERIAL.

ROAD OIL.—**Shipments are now being made faster than new orders are received. The season has been an unusual one for sellers of road oil, and the amount disposed of has been large.** Prices are unchanged, 30% asphaltum oil being quoted at 4 cts. per gal. Texico macadam asphalt, 90 to 95%, is 11 cts. per gal., f. o. b. New York or Philadelphia; A or X Tarvia in bbls. is 8½ to 9½ cts. per gal.; B grade in bbls. is 7 to 8 cts. per gal.

GRANITE BLOCK.—Prices are without change, but the demand has fallen off to a marked degree. This is not unusual at this time of the year. Some very large contracts for granite block pavement have been entered this year. Prices continue unchanged as follows: Cape Ann granite blocks, delivered in New York City, in the old style block, is $1.60 to $1.75 per sq. yd. Dressed block to lay with ¼-in. joint is $2 to $2.10 per sq. yd.

ASPHALTUM.—Some exceedingly low prices have been named on asphaltum paving during the summer, and contractors have, in many cases, made particular efforts to secure the work. Paving business is not up to normal. Prices are largely nominal as follows: Trinidad is quoted at $25 per net ton. California asphaltum is $26 to $30 per net ton, f. o. b. New York, and $16 to $19 at point of shipment.

PAVING BLOCKS, WOOD.—The season's business is nearly over, but the year has been a good one, and it is expected that there will be a large volume of business next year. Prices are as follows: For long leaf yellow pine blocks having not less than 20 lbs. oil per cu. ft., $1.85 is quoted for 3-in. block; $2.05 for 3½-in. block, and $2.25 for 4-in. block. All these prices are per sq. yd., f. o. b. New York.

VITRIFIED BRICK.—The demand is only fair, and prices continue unchanged at 55 to 70 cts. per sq. yd. at the point of shipment.

LUMBER.

Markets have been exceedingly quiet during the month, and little new business has been taken.

Prices are practically unchanged from those given on page 62 in the issue of August 4.

LONG LEAF YELLOW PINE.—The demand shows an improvement. For yard deliveries and vicinity for material passed "merchantable" under the 1905 rules of the Association, prices are as follows:

Prices per Thousand in Yard, New York.

Size.	Length—20 ft. base.	21 to 25 ft.	26 to 30 ft.	31 to 35 ft.
8 in. wide and under by 8 in. thick and under.	$31	$32	$33	$34
10 in. wide by 10 in. thick and under.	33	34	35	36
12 in. wide by 12 in. thick and under.	36	37	38	39
14 in. wide by 14 in. thick and under.	43	44	46	46
16 in. wide by 16 in. thick and under.	45	46	47	48

For pieces longer than 35 ft. and less than 40 ft. add from $4 to $8 to base price.

NORTH CAROLINA PINE.—Prices are without change as follows: For pieces 20 ft. long and less, in car lots, New York, prices per thousand are as follows:

2 × 4-in.	$18	2 × 10-in.	$21
2 × 6-in.	18	2 × 12-in.	22
2 × 8-in.	18		

HEMLOCK.—The base price of Pennsylvania continues unchanged at $21 and West Virginia at $20.50. Quotations named a month ago are without change as follows: Prices Per Thousand f. o. b. cars New York.

Size	Length—10 ft.	12 ft.	14 ft.	16 ft.
2 × 4-in.	$23.00	$21.00	$21.00	$23.00
2 × 6-in. to 2 × 10-in.	21.00	21.00	21.00	18 to 20
3 × 4-in. to 12 × 12-in.	21.50	21.50	22.00	19 to 21
1 × 8-in.	....	18.00	18.00	18.00
1 × 10-in. and 1 × 12-in.	....	18.50	18.50	18.50

CROSS TIES.—More buying has been noticed in the last month, but the demand is far from satisfactory. Prices continue firm.

For first-class, standard Georgia or Florida long leaf yellow pine ties, f. o. b. New York, G. S. Baxter & Co., 15 William St., New York City, quote:

	Cents each.
7 × 9-in. by 8 ft. 6 in.	81
6 × 9-in. by 8 ft.	75
6 × 8-in. by 8 ft.	70

Second-class, sound and square edge, are quoted as follows:

	Cents each.
7 × 9-in. by 8 ft. 6-in.	64
6 × 9-in. by 8 ft.	54
6 × 8-in. by 8 ft.	48

METALS.

COPPER.—**Prices are slightly higher, due to some restriction in the production. It is evident that with consumption going on at the present rate, a restriction of 10% in the production would improve the situation materially. As it is, with an addition of a few million pounds each month to the already large surplus, it gives a feeling of uncertainty which frightens the manufacturers and makes consumers cautious and cause all connected with the industry to hesitate about undertaking new projects. Commodities are only cheap by comparison, and while copper at 12½cts. is very much cheaper than it was three years ago, still large users hesitate about planning new construction involving large quantities of copper when they fear that the price might drop 3 or 4 cts. further.** This fear is attributed to the large stocks. An unwieldly surplus of any commodity makes an unsteady and uncertain market, a thing which is to be avoided by manufacturers. The interests with the low-cost mines are disposed to sell freely for forward delivery, and are stimulating production to the greatest degree. On the other hand, the Amalgamated interests hesitate about making commitments for forward deliveries, and as they hold the balance of power, the world's needs of copper cannot be supplied with metal which costs less than 10 cts. a lb. to produce. The Amalgamated interests are right in their contention that at the present rate of consumption some consumers, at least, will have to come to them for their supplies. Should the restriction of production wipe out the surplus or reduce it to a figure which may be considered nominal, then large consumers will have no hesitancy in going in the market and placing their requirements for months to come. It may be with superior business ability and better organization that this surplus can be digested without difficulty, but such has not been the usual procedure, and it is feared that even the present low prices of 12½ cts. per lb. for electrolytic may, in turn, give way to still lower figures. Others contend that the copper market usually moves in cycles of three years, with comparatively high prices for a period of about three years, and giving way, in turn, to moderate quotations for a similar length of time. It was early in 1907 that copper began to take a spectacular drop in the neighborhood of 25 cts. a lb. to 14 cts., but already it has been possible to buy copper at less than 15 cts. for three years. This is about the only ray of hope some people have for higher prices. Exports are slightly better. Foreign consumption is large. Domestic consumption is fair, but it is not equal to what it was two months ago, although some lines of trade are more active.

PIG TIN.—Near the close of July, when the last report was written, the supply of spot tin in market was practically cornered. This was not done with motive or intention, but was the result of an accident. Still, prices advance sharply, and with the prices then ruling, which were considered high, consumers refused to buy except for nearby requirements. Since then, a fair supply of metal has been received from abroad, but this has been purchased by consumers, and now stocks of spot tin are as small as they have been at any time. Prices have advanced, and while 33 to 34 cts. was considered high last month, the present quotation is 35 to 36 cts. With the opening of the tin plate mills in the Middle West, on account of the settlement of the Amalgamated strike, it is expected that more tin will be used, and possibly it will be difficult to secure supplies as needed. Tin is practically the only metal that is not being produced in excess of the supply, and although its use is expanding almost continuously, no new sources of production have been found. Consequently, many fear that we must look to a high range of tin value for years to come.

LEAD.—Prices are steady, the leading interest is selling shipment lead in New York at 4.40 cts., but outside producers are demanding 4.45 cts. for spot lead. Prices are higher in the West, comparatively speaking, than in the East, for in St. Louis the American Smelting & Refining Co. is asking 4.35 cts., compared with 4.40 cts. in New York, with the freight rate of 15 cts. The paint trade is not as active as it was, and this may have something to do with the hesitancy of the leading interest in advancing its quotation:

Sheet Lead.	Per lb.
Large lots	6.25 cts.
Small lots	6.75 cts.
Lead Pipe.	Per lb.
Large lots	5.75
Small lots	6.40

ROOFING COPPER.—Manufacturers of copper sheet for roofing and other purposes report an active business. One maker had his mill running full time for over two years and a half, an unusual thing in the copper trade, and a report that would not be believed if one were to accept the utterances of copper producers. The base price of sheet copper is 18 cts., giving a very good margin of profit to the rollers. It is difficult to shade this figure because of the excellent demand.

MISCELLANEOUS METALS.—Small lots of metals and metal products can be obtained from jobbers' stores, New York, at the following prices:

	Per lb.
Bismuth	$2.25
Brass tubes, iron pipe sizes:	
½-in.	.19
¾ to 3-in.	.18
3½-in.	.19
4-in.	.20
Brass, sheets	.14½
Brass, rods	.14½
Solder, ½ and ½ guaranteed	.23
Zinc sheets	.08½
Manganese bronze rods	.16
Manganese bronze in crucible form	.14
Monel metal, ingot	.16

OLD METALS.—Due to an improved demand prices are higher. Miscellaneous lots of scrap metal, amounting to about a ton, can be sold to dealers in New York at about the following prices:

	Cts. per lb.
Copper, heavy and crucible	10.75 to 11.00
Copper, heavy and wire	10.50 to 10.75
Copper, light and bottoms	9.50 to 9.75
Brass, heavy	7.25 to 7.50
Brass, light	5.75 to 6.00
Heavy machine composition	9.50 to 9.75
Clean brass turnings	7.00 to 7.25
Composition turnings	8.25 to 8.50
Lead, heavy	... to 3.50
Lead, tea	... to 3.25
Zinc, scrap	... to 3.75

SPELTER.—Prices of spelter have advanced, and in New York 5.40 cts. is demanded for spot shipment. In the West the market is 5.20 to 5.25 cts. Consumption is not large, but the leading consuming interests purchased a round tonnage a few weeks ago, and this has given much strength to the market. Many of the purchasers of spelter claim that they cannot make a profit with prices at less than 5 cts. per lb., and are preparing to close down should quotations again recede to that figure.

OILS AND PAINTS.

PETROLEUM PRODUCTS.—The demand in the East is less active than a month ago, but in the West business continues good. The Standard Oil Co. quotes the price of crude oil in bbls. at the wells as follows: Pennsylvania, Second sand and Tiona, $1.30; Mercer black 97 cts.; Corning, 77 cts.; New Castle, 94 cts.; Indiana, 77 cts.; Illinois, 60 cts.; Illinois heavy, below 30 gravity, 52 cts.; Kansas heavy, 30 cts.

In the New York market petroleum from tank wagon is unchanged at 7½ cts. per lb.

Auto naphtha and stove gasoline continues without change at 14¾ cts.

Fuel oil is also unchanged, selling at 93 cts. to $1.03 per bbl. in tank cars on track at seaboard points.

LINSEED OIL.—The month has been unusually quiet after the wide fluctuations in the market in July. It was expected that there would be numerous changes in August, but the price has been steadily maintained at approximately 90 to 91 cts. per gal. for City raw; 89 to 90 cts. for out of town raw, and 95 cts. for Calcutta oil. Flaxseed is practically unchanged from last month, selling at $2.32½ to $2.43 per bushel in Duluth.

SPIRITS TURPENTINE.—There has been little activity in the turpentine market during the last month, although prices advanced moderately only to decline again. Prices now are practically unchanged from last month at 72 to 73 cts. per gal. in 5 bbl. lots. In Savannah, turpentine is quoted 68¾ cts., and in Wilmington, Del., at 67 cts.

PAINTS.—The demand for paint has fallen off to quite an extent during the last month. There has not been the usual seasonable demand, but due to the high price of oil, many of the largest consumers of paint have postponed painting operations. Some of these postponements are indefinite, and will probably continue until the price of oil is cheaper.

Prices of white lead in oil are unchanged. For lots of 500 lbs. or over, in 100, 250 and 500-lb. kegs, 7¼ cts. per lb. is quoted, in 25 and 50-lb. kegs, 7½ cts. per lb. Red lead and litharge in bbls., half bbls. and 100-lb. kegs is 7¼ cts. per lb.

Brown metallic is quoted at $16.50 to $22 per ton; red metallic, $14 to $18 per ton. American Venetian red in ton lots or larger is 75 cts. to $1.25 per 100 lbs., and English Venetian red, $1.15 to $1.60 per 100 lbs.

Graphite paints are not in as active demand, and there is a disposition on the part of paint manufacturers not to accept orders for future delivery except when they can be protected by purchases of linseed oil. Some manufacturers are booking orders at $1.20 to $1.30 per gal.

Hydrex preservative paint is 75 cts. per gal. in bbl. lots New York City.

Colors in oil are quoted at the following prices per lb.: Lamp black, 12 to 14 cts.; Chinese blue, 36 to 46 cts.; Prussian blue, 32 to 36 cts.; Van Dyke brown, 11 to 14 cts.; Chrome green, 12 to 16 cts.; Row or Burnt Sienna, 12 to 15 cts.; Raw or Burnt Umber, 11 to 14 cts.

MISCELLANEOUS.

ROPE.—The prices of rope are firm, but no change has been made in quotations since the last month. Pure Manila is sold at 9 to 9½ cts.; second grade, 8½ to 9 cts.; competitive grades, 8 to 8½ cts. per lb. Pure Sisal is 7¼ to 7½ cts. for the highest grades, and 6¼ to 6¾ cts. for less desirable grades. Jute rope in commercial sizes is 5½ to 6 cts. per lb.

PINE TAR.—Prices have advanced slightly, being the third successful advance in as many months. Kiln is quoted at $7.00, and retort at $6.50 to 6.75. These prices are for bbls. of 480 lbs.

RUBBER.—The price of rubber has declined with considerable ease, and now, although the market price has been cut to the extent of 20%, there is little demand, and the market is descvribed as weak. It may be that the decline will go too far. Up-River Para fine can now be had at $1.90 to $1.95 per lb., a decline of 20 cts., as compared with last month. Guayule is selling at the unchanged price of 90 cts. to $1 per lb., and Cancho ball at $1.40. This represents a decline of 5 cts., compared with last month.

PITCH.—The best grades of pitch are sold at $14 per net ton in carload lots. Small quantities are held at $16 per net ton.

ROOFING SLATE.—The price of roofing slate declined slightly last month, and on **Aug. 18 a new set of prices was sent out on Bangor sale. The following quotations are per "square," or one hundred sq. ft. of roof surface in carlod lots of the size is most general use, f. o. b. quarry stations:**

	Per 100 sq. ft.
Vermont, sea green	$4.00 to [illegible]
Pennsylvania, Bangor Ribbon	4.00 to [illegible]
Maine, Brownsville No. 1	6.00 to [illegible]
Maine, Brownsville No. 2	5.60 to [illegible]
Red	10.50 to [illegible]
Unfading green	4.50 to [illegible]
Genuine Bangor	4.50 to [illegible]
Pen Argyle	4.00 to [illegible]

PAPER.—Prices are without change from last month, as follows:

	Per [illegible] 108 [illegible]
Tarred Paper:	
Standard 2-ply, 40 lbs.	$[illegible]
Extra heavy, 2-ply, 45 lbs.	[illegible]
Standard 3-ply, 60 lbs.	[illegible]
Extra heavy, 3-ply, 70 lbs.	[illegible]

	Per [illegible] 500 [illegible]
Rosin Sized Sheating:	
Light, 35 lbs.	$0.[illegible]
Medium, 30 lbs.	[illegible]
Heavy, 40 lbs.	[illegible]

ROOFING CEMENT.—Prices are changed at $25 per ton for Texaco.

OAKUM.—There is a fair inquiry, and prices show little change. The best grade is off ¼ ct., selling at 6¼. Other prices are as follows: U. S. Navy, 5¾ cts.; common and plumbers' oakum, 2¼ cts. per lb.

WATERPRROFING.—The prices for carload lots, f. o. b. cars New York, are as follows: Hydrex waterproofing felt, $1.25 per 100 sq. ft.; Hydrex compound "A," 25 cts. per gal.; Hydrex compound "B," 18 cts. per gal.

Texaco waterproofing cement is $30 per ton in car lots, f. o. b. cars New York or Philadelphia.

Asphaltum, for waterproofing, is sold at $25 to $27 per net ton.

Glidden's graphite acid proof coating is sold at $1.25 per gal. in bbl., and ½ bbls., and $1.40 per gal. in 5 gal. cans. These prices are f. o. b. Cleveland or for delivery from warehouse, New York, Chicago, St. Louis, Boston or Atlanta.

EXPLOSIVES.—Dynamite of the kind usually used by contractors is approximately 11 to 13 cts. per lb. f. o. b. factory in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20 to $1.40 per keg or 25 lbs. in lots of 10,000 lbs. The following prices prevail on Trojan in carload lots, minimum 24,000 lbs., f. o. b. Pacific Coast points; No. 1, 13½ cts.; No. 2, 10½ cts.; No. 3, 10 cts. They have a disruptive force equivalent to 60%, 40% and 30% of nitro-glycerine.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft., $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 24 ft., $9.40; 30 ft., $12; 36 ft., $14.60.

Caps in lots of 10,000 are $7 to $8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

LIGHTERAGE LIMITS.—The free delivery or "Lighterage Limits" in New York City are as followgs: In Manhattan, from a point opposite the Fort Lee ferry, south along the Hudson River around the Battery and north along the East and Harlem Rivers to the Jerome Ave. Bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City; points on the north and east shore of Staten Island, between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Eristina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Port Cove, Astoria, Long Island City.

ASBESTOS.—The demand is fair, and prices continue without change. Asbestos building felt and sheathing in less than ton lots is 3½ cts. per lb. for the light, weighing from 6 to 30 lbs. per 100 sq. ft.; 4 cts. per lb. is charged for the heavy, weighing from 45 to 56 lbs. per 100 sq. ft.

Millboard is made in standard sheets, 40 × 40 ins., and 42 × 4 ins. It varies in thickness from 1-32 to ½-in. and in weight from 2 to 27 lbs. per sheet. The net price in 100 lbs. lots is 5 cts. per lb.

Transite, asbestos wood, used for fire-proofing, ventilators and smoke jacks, comes in standard sheets, 36 × 48 ins., 42 × 48 ins., and 42 × 96 ins. The prices, f. o. b. factory, Nassau, N. H., are as follows:

Thickness.	Weight.	Price.
⅛-inch	1 lb.	$0.08
3/16-inch	1½ lbs.	.12
¼-inch	2 lbs.	.16
5/16-inch	2½ lbs.	.20
⅜-inch	3 lbs.	.28
7/16-inch	3½ lbs.	.28
½-inch	4 lbs.	.32
9/16-inch	4½ lbs.	.36
⅝-inch	5 lbs.	.40
¾-inch	6 lbs.	.44
⅞-inch	7 lbs.	.48
1 inch	8 lbs.	.52
1¼-inches	10 lbs.	.56
1½ inches	12 lbs.	.64
1¾ inches	16 lbs.	.72
2 inches	16 lbs.	.80

CONTRACT PRICES.

(See also pp. 109 and 110.)

RIVER EXCAVATION.—**Niagara River Section of Black Rock Harbor and Channel, N. Y.—Bids were received Aug. 16 by Lieut.-Col. J. G. Warren, Corps of Engrs., from the following: (A) Daly & Hannan Dredging Co., Ogdensburg, N. Y.; (B) Arthur H. Vogel, Milwaukee, Wis.; (C) Empire Engineering Corporation, New York City; (D) Buffalo Dredging Co., Buffalo, N. Y.; (E) Duluth Superior Dredging Co., Duluth, Minn.; (F) Great Lakes Dredge & Rock Co., Chicago, Ill. The itemized bids were as follows:**

Excavating.	A	B	C	D	E	F
580,000 cu. yds. earth	$0.35	$0.22	$0.28	$0.24	$0.35	$0.28
190,000 cu. yds. rock	3.10	2.05	2.55	2.24	2.80	2.70
10,000 cu. yds. material handled with derrick bucket	1.25	1.50	.40	1.20	1.30	1.30
Totals	$804,500	$532,100	$650,900	$576,800	$748,000	$688,400

SEWERS.—Winnemucca, Nev.—The following successful bid of R. M. BARSDEN & CO., Butte, Mont., was received by Louis C. Kelsey, Engr., 402 Dooly Bldg., Salt Lake City, Utah:

18,1[illegible] cu. yds. earth	$0.68
[illegible] cu. yds. gravel and boulders	.95
13,4[illegible] lin. ft. 8-in. vitrified pipe..	.30
3,1[illegible] lin. ft. 10-in. vitrified pipe..	.40
2,4[illegible] lin. ft. 12-in. vitrified pipe..	.50
[illegible] lin. ft. 15-in. vitrified pipe..	.75
1,7[illegible] lin. ft. 18-in. vitrified pipe..	1.05
[illegible] 8 × 6-in. Y's	1.20
[illegible] 10 × 6-in. Y's	1.35
[illegible] 12 × 6-in. Y's	1.60
[illegible] 15 × 6-in. Y's	2.30
[illegible] 18 × 6-in. Y's	4.10
[illegible] manholes, each	57.50
[illegible] ft. manholes, addit'n'l depth	3.50
[illegible] flush tanks, each	95.00
Septic tank (lump sum)	3,500.00
Total	$31,944.85

BARGE CANAL.—Albany, N. Y.—Bids were received by F. C. Stevens, Supt. Public Works, Albany, N. Y., Aug. 23, for Barge Canal Contract No. 79, providing for the construction of a highway bridge over the Oswego Canal at Bridge St., Oswego, as follows: (A) Engineer's estimate; (B) M. Fitzgerald, Hoosick Falls, N. Y.; (C) E. J. Doyle & Co., 82 State St., Albany, N. Y.; (D) United Construction Co., 467 Broadway, Albany, N. Y.; (E) Lupfer & Remick, Ellicott Square, Buffalo, N. Y.; (F) G. & W. Mfg. Co., 30 Church St., New York. The itemized bids were as follows:

HIGHWAY BRIDGE, OSWEGO, N. Y.

	A.	B.	C.	D.	E.	F.
Cofffer-dam, pumping, bailing and draining, lump sum	$1,800.00	$1,800.00	$1,800.00	$1,800.00	$1,800.00	$1,500.00
1,600 cu. yds. excavation	1.00	1.25	1.00	1.00	1.00	2.00
650 cu. yds. second-class concrete	8.00	8.00	8.00	8.00	8.00	11.80
520 cu. yds. reinforced concrete	15.00	15.00	13.00	15.00	14.00	14.00
382,000 lbs. structural steel	.05	.0495	.048	.0475	.045	.048
49,000 lbs. metal reinforcement	.035	.04	.035	.035	.035	.03
620 sq. yds. wood block pavement	3.00	3.50	3.00	2.80	3.00	3.00
Maintaining highway traffic, lump sum	800.00	800.00	800.00	800.00	800.00	600.00
Restoring old walls, lump sum	60.00	60.00	60.00	60.00	60.00	50.00
Deduct price to be paid to the State of New York for old bridge superstructure in place which is to be removed by the contractor without expense to the state, lump sum	200.00	200.00	200.00	200.00	25.00	200.00
Total	$39,735	$40,499	$37,931	$38,656	$37,480	$41,766

INDUSTRIAL NOTES.

C. H. HUGHES & CO., engineers, announce that they have moved from 115 Broadway to 64 Wall St., New York City.

THE ROEBLING CONSTRUCTION CO. announces the removal of its New York City offices to the 32d floor of the Metropolitan Tower, 1 Madison Ave., New York City.

A CORRECTION.—Sheet piling is selling at 1.60 cts. per lb. f. o. b. Pittsburg and not at 1.50 to 1.60 cts., as quoted in Current Prices of Engineering Materials, page 69, the issue of August 4.

THE DEPARTMENT OF CIVIL ENGINEERING, Carnegie Technical Schools, Pittsburg, Pa., would be glad to receive copies of trade catalogs relating to any and all branches of the work of the civil and sanitary engineer.

THE TIDE WATER BUILDING CO. and Thomas B. Bryson, builders of a portion of the Fourth Avenue Subway, Brooklyn, N. Y., have awarded contract to the Blaw Collapsible Steel Centering Co., Pittsburg, for furnishing collapsible steel forms of a special design for this work.

TRIBUS & MASSA, Consulting Engineers, 88 Warren St., New York City, have been retained to take charge of the sewer system and sewage disposal works at Monticello, N. Y. This work was commenced a short time ago by Mr. George N. Bell, Kingston, N. Y., recently deceased.

THE HENNEBIQUE CONSTRUCTION CO., 1170 Broadway, New York City, has been awarded the contract for a concrete "Compressol" pile foundation for the addition to the Roessler & Hasslacher Co., Perth Amboy, N. J.; also for the new factory of the Hart & Hegeman, Capitol Ave., Hartford, Conn.

THE ILLINOIS TUNNEL CO., Chicago, recently ordered from the Kilbourne & Jacobs Mfg. Co., Columbus, Ohio, 500 freight cars for use in the Chicago subway. These cars are small double-truck gondolas, having a capacity of 15,000 lbs. They are of all steel construction equipped with Andrews small size side frames and bolsters.

THE HAMPSON-FIELDING Engineering Co., Denver, Colo., announces that it has recently moved into quarters at 1713 Wazee St., that city. The company has, at this location, a standard gage track at the rear of the store, which will enable it to handle more quickly its machinery and contractors' supplies.

AMONG THE ORDERS RECEIVED by the Crocker-Wheeler Co., Ampere, N. J., are two 600 K. W. D. C. turbo generators; one 500 K. W. synchronous motor generator set; one 400 K. W. D. C. turbo generator, and one 750 K. W. D. C. generator, as well as a number of smaller motors and generators of various types.

THE SENECA CHAIN COMPANY, Kent, Ohio, has awarded the contract for new chain shop to be built in that place. The new buildings will be somewhat larger than the old ones destroyed by fire last year, will cover approximately 3¼ acres, and the company will materially increase its output. A new testing machine will be installed, making it possible for the company to test chain of the largest size.

THE POWER SPECIALTY CO., 111 Broadway, New York, is about completing a modern foundry, 100 × 140 ft., in Dansville, N. Y. This foundry has a complete equipment of electric travelling cranes and an industrial railway. The addition was made necessary by the increased demand for the Heenan refuse destructors and the Foster superheaters. The company has recently received an order for a 60-ton refuse destructor for Montgomery, Ala.

THE NEW ENGLAND ENGINEERING CO. announces that its engineering offices, under the management of Mr. L. L. Gaillard, have been removed from New Haven, Conn., to 50 Church St., New York City. Mr. J. W. Thomas, formerly with Westinghouse, Church, Kerr & Company, New York City, has been appointed Mechanical Engineer, and Mr. L. R. Parker, of Westinghouse Electric and Manufacturing Co., has been appointed Electrical Engineer.

GROSS EARNINGS of railways, having 216,909 miles of road, amounted to $1,255,758,276 in the six months ending June 30, 1910. This establishes a new high record in railway gross earnings, being an increase of nearly $160,000,000 compared with last year, or 15.54%. These figures are of gross earnings only and although the net returns have not yet been compiled, it is well known that the figures will be far less satisfactory. A falling off in net is frequently the case when gross earnings advance rapidly, or, in other words, railways are not capable of economically handling a great increase in traffic.

Much of the blame this year has been laid to the inability of the railways to raise their rates. Press dispatches from Washington report that the railways have been making improvements charging the cost to maintenance of way expenditures. This may be true, but the complaint of dealers handling railway supplies betokens that there has been a rigid curtailment in the expenditures by railways for all kinds of material. Even in ties, the cutting down of requisition has been abnormal.

THE FERGUSON CONTRACTING CO., 37 Wall St., New York City, went into the hands of a receiver August 3. The liabilities are given as $660,000 and assets $640,110, besides several claims which are in litigation. The trouble was caused by the inability to finance the company after the death of Mr. Ferguson, which occurred suddenly June 22 (Engineering News, July 7). The company was incorporated in 1893 under the laws of Illinois and reorganized as a New York corporation. In the following list is given the contracts the company now has on hand, together with the estimated value of the work to be done and the time required to complete the individual jobs: City & County Contracting Co., 40% completed, grading on New York, Westchester & Boston Railway, $325,000, finished 12 to 24 months; Atlantic Coast Line R. R. Co., 80% completed, construction, 13 miles of railroad in North Carolina, $50,000, five months; Winstom-Salem Southbound R. R. Co., 75% completed, construction 17 miles railroad in North Carolina, $75,000, five months; Kansas City R. R. Co., 70% completed, reconstruction 10 miles railroad in Kansas, Arkansas, Oklahoma, Missouri, Louisiana and Texas, $150,000, five months; Prairie Pebble Phosphate Co., 40% completed, excavation of 5,000,000 yds. of material from phosphate beds in Florida, $600,000, three years; Florida Mining Co., 10% completed, excavating 1,000,000 yds. of material from phosphate beds of Florida, $180,000, three years. Total amount of work remaining to be done, $1,380,000.

WATER SUPPLY.—San Francisco, Cal.—Bids were received July 27 for laying high-pressure mains in connection with the Twin Peaks reservoir improvement from: (A) Raisch Improvement Co.; (B) Oscar S. Levy; (C) Metropolis Construction Co.; (D) Foster & Vogt; (E) Keystone Construction Co.; (F) Healy Tibbitts Construction Co. The itemized bids were as follows:

WATER SUPPLY, SAN FRANCISCO, CALIFORNIA.

	A	B	C	D	E	F
60 lin. ft. delivering and laying 6-in. c.-i. pipe	$0.15	$0.20	$0.15	$0.30	$0.17	$0.40
1,310 lin. ft. delivering and laying 8-in. c.-i. pipe	.22	.25	.20	.21	.20	.50
525 lin. ft. delivering and laying 10-in. c.-i. pipe	.29	.40	.25	.28	.28	.60
688 lin. ft. delivering and laying 14-in. c.-i. pipe	.38	.50	.35	.40	.36	.65
17,391 lin. ft. delivering and laying 18-in. c.-i. pipe	.62	.65	.50	.64	.51	.70
4,014 lin. ft. delivering and laying 20-in. c.-i. pipe	.92	.75	.75	.81	.68	.80
3 delivering and setting 6-in. gate valves	6.00	5.00	3.00	2.75	3.50	5.00
6 delivering and setting 8-in. gate valves	7.00	5.00	4.00	3.00	4.00	6.00
2 delivering and setting 12-in. gate valves	11.00	8.00	6.00	6.50	6.00	7.00
20 delivering and setting 16-in. gate valves	15.00	10.00	8.00	10.50	9.50	8.00
38 delivering and setting hydrants	8.00	6.06	10.00	6.00	5.50	8.00
14,871 cu. yds. excavating and back filling	1.03	1.00	1.00	1.00	1.30	1.05
150 cu. ft. masonry, brick	.40	.50	.50	.25	.50	.50
120 cu. yds. masonry, concrete	9.00	12.00	10.00	12.00	12.00	16.00
8,000 lbs. steel, reinforcing	.04	.05	.04	.04	.05	.04
5,144 sq. yds. paving, asphalt, wearing surface 2-in.; concrete, 6-in.	1.62	2.25	2.70	2.25	2.34	2.70
654 sq. yds. paving, basalt bricks, sand foundations, blocks furnished	.54	.54	.90	.63	.58½	.54
270 sq. ft. sidewalks, artificial stone	.20	.25	.20	.20	.25	.20
18,272 lin. ft. wooden duct, hauling and placing	.14	.10	.10	.12½	.09	.15

The lowest bid for the complete work amounted to $44,705, submitted by the Raisch Improvement Co.

*SEWERS.—Borough of Madison, N. J.—Bids were received on Aug. 8 by Herring & Fuller, Engrs., 170 Broadway, New York City, from the following: (A) CHAS. IPPOLITO, Orange, N. J. (awarded contract); (B) Bond & McNalley, Weehawken, N. J.; (C) Jersey Paving Corp., Newark, N. J.; (D) Antonia Costa, Orange, N. J.; (E) D'Amito & Stefanelli, Newark, N. J.; (F) Hudson Terminal Const. Co., New York City; (G) Donaran & Benson, Bayonne, N. J.; (H) Jos. B. O'Rourke, Boston, Mass.; (I) Morrone Construction Co., New York City; (J) Jos. A. Christie, Newark, N. J.; (K) Morton & Miller, Roselle Park, N. J.; (L) Miele & Bruno, Newark, N. J.; (M) John McNabb, Bound Brook, N. J.; (N) Chas. Cranford, Brooklyn, N. Y.; (O) Madsen Construction Co., Long Beach, N. Y. The itemized bids are as follows:

SEWERS, BOROUGH OF MADISON, NEW JERSEY.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
35,115 lin. ft. 8-in. vitrified pipe 0- 8-ft. cut	$0.46	$0.52½	$0.52	$0.46	$0.52	$0.54	$0.70	$0.55	$0.60	$0.56	$0.59	$0.69	$0.54	$0.70	$0.75
6,875 lin. ft. 8-in. vitrified pipe 8-10-ft. cut	.62	.55½	.66	.63	.65	.71	.77	.65	1.00	.68	.71	.95	.68	.86	.90
2,100 lin. ft. 8-in. vitrified pipe 10-12-ft. cut	.86	.69½	.86	.90	.85	.91	.88	1.10	1.20	.90	.95	.97	.83	1.04	.91
665 lin. ft. 8-in. vitrified pipe 12-14-ft. cut	1.07	.89	1.07	1.35	1.12	1.25	1.04	1.40	1.55	1.45	1.55	.98	1.25	1.26	1.33
975 lin. ft. 8-in. vitrified pipe 14-16-ft. cut	1.49½	1.22	1.37	1.90	1.70	1.45	1.20	1.68	1.75	2.10	2.00	1.00	1.75	1.82	1.95
345 lin. ft. 8-in. vitrified pipe 16-18-ft. cut	2.22	1.60½	2.25	2.68	1.95	1.75	1.50	2.20	1.90	2.65	2.75	1.04	2.50	2.15	2.36
250 lin. ft. 8-in. vitrified pipe 18-20-ft. cut	2.88	1.91	3.00	3.80	2.35	2.35	1.62	2.45	2.15	3.60	4.00	2.10	3.00	2.51	2.80
3,600 lin. ft. 10-in. vitrified pipe 0- 8-ft. cut	.52½	.60	.67	.59	.63	.65	.69	.70	.72	.65	.69	1.05	.68	.77	.81
300 lin. ft. 10-in. vitrified pipe 8-10-ft. cut	.67	.63½	.87	.70	.72	.73	.77	.75	.90	.95	.83	1.23	.80	.93	.98
200 lin. ft. 10-in. vitrified pipe 10-12-ft. cut	1.04	.77	1.00	1.00	.97	.96	.93	1.15	1.10	1.25	.97	1.25	.95	1.12	1.17
500 lin. ft. 12-in. vitrified pipe 0- 8-ft. cut	.64½	.66	.76	.90	.73	.71	.80	.73	.80	.85	.73	1.10	.84	1.04	.90
200 lin. ft. 15-in. vitrified pipe 0- 8-ft. cut	.98	.84	.86	.98	1.00	.87	.93	.95	.90	1.20	.95	1.12	.90	1.20	1.05
1,025 lin. ft. 15-in. vitrified pipe 8-10-ft. cut	1.08	.90½	.95	1.33	1.06	1.05	1.02	1.20	1.45	1.40	1.07	1.35	1.08	1.33	1.30
300 lin. ft. 15-in. vitrified pipe 10-12-ft. cut	1.43½	1.20	1.27	1.46	1.30	1.26	1.20	1.25	2.25	1.75	1.25	1.35	1.25	1.48	1.40
200 lin. ft. 15-in. vitrified pipe 12-14-ft. cut	2.14	1.55	1.67	1.96	1.43	1.44	1.38	1.45	2.25	2.50	1.75	1.40	1.85	1.77	1.65
450 lin. ft. 15-in. vitrified pipe 14-16-ft. cut	2.40	1.80	2.39	2.60	2.17	1.75	1.56	1.70	2.60	3.10	2.55	1.43	2.45	1.93	2.00
4,080 lin. ft. 18-in. vitrified pipe 0- 8-ft. cut	1.08	1.15	.87	1.09	1.05	1.10	1.20	1.20	1.00	1.60	1.25	1.63	1.30	1.49	1.50
510 lin. ft. 18-in. vitrified pipe 8-10-ft. cut	1.37	1.33	1.17	1.46	1.35	1.35	1.31	1.45	2.00	2.00	1.40	1.73	1.40	1.64	1.50
330 lin. ft. 18-in. vitrified pipe 10-12-ft. cut	1.78	1.69½	1.75	1.86	1.50	1.55	1.53	1.65	2.45	2.50	1.90	1.85	1.50	1.79	2.00
295 lin. ft. 18-in. vitrified pipe 12-14-ft. cut	2.71	2.00	2.50	2.12	1.74	1.80	1.75	2.00	2.45	3.25	2.40	1.95	1.85	2.26	2.50
500 lin. ft. 18-in. vitrified pipe 14-16-ft. cut	2.95	2.66	3.00	2.87	2.50	2.50	2.00	2.20	2.75	4.25	3.00	2.25	2.40	2.71	3.00
1,000 "Y" 5-in. branches on 8-in. pipe	.50	.30½	.60	.40	.35	.35	.53	.50	.31	.30	.50	.95	.60	.38	.75
100 "Y" 5-in. branches on 10-in. pipe	.69	.45	.90	.48	.45	.50	.72	.72	.48	.45	.85	1.35	.75	.49	1.12
20 "Y" 5-in. branches on 12-in. pipe	.85	.55	1.20	.60	.55	.70	.95	.85	.62	.60	1.25	2.00	1.00	.78	1.40
50 "Y" 5-in. branches on 15-in. pipe	1.20	.88	1.56	1.20	.75	.95	1.35	2.05	.85	.75	1.75	2.25	1.40	.97	2.50
40 "Y" 5-in. branches on 18-in. pipe	2.00	1.27½	1.90	1.95	1.00	1.20	1.90	2.10	1.10	1.20	2.10	2.50	2.10	1.33	3.85
1,260 one-eighth 5-in. bends	.23	.19	.27	.35	.25	.22	.17	.19	.22	.25	.25	.30	.24	.12	.20
50 "Y" 5-in. branches, including caps	.50	.40	.35	.71	.35	.30	.40	.40	.70	.50	.50	10.00	.45	.36	.32
500 vitrified 5-in. pipe risers	.50	1.01	.25	.38	.72	3.60	.40	.45	.60	.50	.75	.35	.35	.08	.60
12,000 vitrified 5-in. pipe for house connections	.30	.42	.34	.39	.36	.35	.50	.42	.50	.40	.45	.40	.48	.60½	.70
26 flush tanks with connections	75.00	99.00	90.00	75.00	80.00	80.00	85.00	85.00	100.00	95.00	85.00	100.00	80.00	178.00	120.00
130 manholes with appurtenances	35.00	41.80	37.00	36.00	45.00	45.00	32.00	43.00	45.00	42.00	45.00	50.00	45.00	89.54	100.00
100 lin. ft. cast-iron pipe, per ton	31.50	22.50	28.50	35.00	30.00	50.00	24.10	35.00	40.00	26.00	50.00	38.75	48.00	32.67	60.00
500 lin. ft. tile drain, per lin. ft.	.25	.33	.10	.35	.15	.15	.50	.15	.20	.75	.30	.75	.26	.12	.50
50 cu. yds. rock excavation	3.00	3.30	2.00	2.50	4.00	2.00	6.00	4.00	2.00	4.00	1.50	4.00	5.00	2.00	4.00
100 cu. yds. extra earth excavation	.60	.44	.60	1.10	1.00	.35	.60	1.00	1.00	1.00	.65	1.00	.50	.73	1.00
1,000 cu. yds. extra earth filling	.40	.44	.60	.50	.40	.20	.50	1.00	.50	.50	1.00	.55	1.60	1.21	.80
25 cu. yds. extra broken stone or gravel filling	1.50	2.20	2.00	2.20	2.35	1.75	1.25	2.00	2.00	3.00	1.50	.75	1.60	8.60	2.00
25 cu. yds. concrete	6.00	7.70	6.00	7.00	6.00	7.50	7.00	7.00	6.00	10.00	8.00	7.00	6.00	8.00	8.00
2,000 ft. B. M. lumber for foundations	35.00	50.00	35.00	40.00	35.00	40.00	40.00	40.00	40.00	45.00	40.00	45.00	35.00	30.25	50.00
500 lin. ft. piles	.50	.27½	.40	.52	.40	.25	.20	.50	.50	1.50	.50	1.00	8.00	.61	.50
15,000 ft. B. M. lumber for sheathing	32.00	33.00	35.00	35.00	29.00	35.00	40.00	35.00	40.00	40.00	37.50	45.00	35.00	30.25	36.00
15,000 sq. yds. resurfacing of macadam streets	.20	.27½	.33	.17	.35	.10	.20	.35	.50	.40	.50	.43	.40	.18	.60
60 lin. ft. cast-iron pipe for force main, per ton	41.60	44.00	28.50	48.00	40.00	48.00	23.70	35.00	40.00	90.00	50.00	55.00	40.00	60.50	50.00
Pumping station on North St. complete (lump sum)	5,586.70	4,750.00	5,000.00	5,475.00	4,900.00	5,750.00	8,000.00	9,500.00	5,500.00	8,800.00	7,500.00	7,000.00	17,000.00	10,650.00	5,100.00
Total	$67,335	$69,856	$70,529	$70,761	$72,374	$74,223	$78,728	$81,369	$87,117	$88,519	$88,524	$93,051	$96,777	$101,739	$108,081

A NEW CREOSOTING PLANT has been built at Bradford, Pa., by the Buffalo, Rochester & Pittsburg Ry. This plant, which was built under the direction of Mr. E. F. Robinson, Ch. Engr., is now in operation. The full cell process is used. Timber grown along the right of way is treated. This includes beech, birch, maple, pin oak, red oak, black oak, elm, jack, pine, gum, hickory and ash. The plant which has a capacity of 250,000 ties a year is of fireproof construction.

THE ELECTRO-MECHANICAL ENGINEERING CO., Manhattan Building, Chicago, which is engaged in the preparation of plans and specifications for the remodeling and enlargement of the electric light and water plant at Bremen, Ind., reports a very busy season. The company has devoted its attention to consulting and designing engineering along electrical, mechanical and chemical lines. Recently it has branched out also into the contracting field, and is prepared to contract for the complete installation of power and industrial plants.

TRADE PUBLICATIONS.

CONCRETE CHIMNEYS.—General Concrete Construction Co., Chicago, Ill.; 5 × 8 ins.; pp. 24; illustrated.

This company for some years has been building a tapered concrete chimney after designs of their own and with special steel forms of their own invention. In this latest catalog the construction is briefly described and illustrated and a number of testimonials reproduced.

CONCRETE PILES.—Portland Concrete Pile & Equipment Co. (Inc.), Portland, Ore.; 6 × 9 ins.; pp. 22; illustrated.

The pile patented by this company is formed by first driving a rigid hollow shell and then pulling it gradually out, filling the opening so left with concrete until the whole pile is completed. The above noted booklet describes the process and illustrates several operations.

CONCRETE PROPORTIONING. — Marquette Cement Mfg. Co., Chicago. Card and celluloid slide; 2¼ × 4¼ ins.

The card has tables showing the proportions and amounts of material for concrete of various mixtures and various sizes of stone. With the slotted celluloid case it forms a "slide rule" showing at a glance the amounts required for any desired proportions of mix.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56 of Advertisements and Construction News page 110.

SEWERAGE AND SEWAGE DISPOSAL.

Chatham-Madison, New Jersey.

Sealed proposals will be received by the joint meeting of the Boroughs of Chatham and Madison, New Jersey, at eight o'clock P. M. on the nineteenth day of September, 1910, for furnishing all material and doing all work necessary to the complete construction of:

First—About one mile of vitrified pipe sewers, eighteen (18) inches in size, with Y branches, manholes and other necessary appurtenances.

Second—A sewage disposal works with a rated capacity of six hundred thousand (600,000) gallons per day.

All in accordance with the plans and specifications on file in the Borough offices at Chatham and Madison, and also in the offices of Hering and Fuller and of Clyde Potts, Engineers, New York City, from whom copies may be obtained.

Proposals shall be made on the blank forms to be obtained from the Engineers, shall be sealed and filed with the Secretary of the Joint Meeting at the time above stated when they will be publicly opened and read.

Each proposal on the first proposition must be accompanied by a certified check for one thousand dollars ($1,000).

Each proposal on the second proposition must be accompanied by a certified check for one thousand, five hundred ($1,500) dollars.

The Joint Meeting reserves the right to reject any and all bids, waive any informality in the bids received, and to accept any bid which it deems most favorable to the interests of the Boroughs.

FRANK L. KELLEY,
Chairman.
J. THOMAS SCOTT, Secretary,
Chatham, N. J.

CONTRACT PRICES.

WIRE ROPE.—Vicksburg, Miss.—The following were the lowest price named in the bid received by Capt. Clarke S. Smith, Corp. Engrs., U. S. A., July 20: 24 pieces 1-in. wire rope, 400 ft. long, 13.93 cts. per ft.; 12 pieces 1-in. wire rope, 200 ft. long, 13.93 cts. per ft.; 15,000 lbs. No. 9 Silicon bronze wire, 15.50 cts. per lb.; 180,000 lbs. ⅝-in. galvanized wire strand, 2.87 cts. per lb.; 80,000 lbs. ⅜-in. galvanized wire strand, 2.54 cts. per lb.; 280,000 lbs. ¼-in. galvanized wire strand, 2.76 cts. per lb.; 75 coils Manila rope, ¾ to 2-in. diameter, 8.865 cts. per lb.; 1,200 lbs. 9-in. wire spikes, 2.14 cts. per lb.; 10,000 cable clips, Crosby or equal, for ⅜-in. wire strand (Monarch), 1.8 cts.

REGRADING AND PAVING.—Seattle, Wash.—Bids for the improvement of Fifth Ave. and Fifth Ave. South, were received by M. H. Strause, City Engr., Aug. 5, from the following: (A) Grant, Smith & Co., and Stillwell, Seattle, Wash.; (B) P. J. McHugh, Seattle, Wash.; (C) International Contract Co., Seattle, Wash.; (D) MARKS RUSSELL & GALLAGHER (awarded contract). The itemized bids are as follows:

REGRADING AND PAVING, SEATTLE, WASH.

		A	B	C	D
	Abstract of title (fixed estimate)	$5,000.00	$5,000.00	$5,000.00	$5,000.00
	Clearing and grubbing (lump sum)	1,000.00	4,000.00	11,700.00	1,000.00
190,000	cu. yds. earthwork	.50	.45	.46	.49
21	M. ft. B. M. curbs and gutters	22.00	19.00	25.00	19.00
4	M. ft. B. M. box drains	20.00	25.00	35.00	17.50
9	M. ft. B. M. alley crossings	20.00	22.00	35.00	17.00
50	sq. yds. concrete walks	1.10	1.00	1.40	1.20
63	M. ft. B. M. wood walks and stairways	21.00	28.00	35.00	18.00
12	M. ft. B. M. wood walks, temporary	20.00	16.00	35.00	15.00
20	M. ft. B. M. bulkhead lumber	22.00	25.00	30.00	20.00
2,500	lbs. bulkhead iron	.06	.07	.08	.05
50	M. ft. B. M. new lumber	20.00	18.00	25.00	13.00
78	M. ft. B. M. old lumber relaid	7.50	5.00	10.00	5.50
25	M. ft. B. M. temporary brdg. lumber	25.00	25.00	30.00	16.50
5	M. ft. B. M. shear boards	22.00	25.00	20.00	15.00
252	lin. ft. 8-in. pipe sewer	1.60	1.50	1.81	1.40
518	lin. ft. 10-in. pipe sewer	2.10	1.60	2.20	1.50
2,570	lin. ft. 12-in. pipe sewer	2.35	2.00	2.45	2.00
766	lin. ft. 15-in. pipe sewer	2.75	2.25	3.25	2.40
740	lin. ft. 21-in. pipe sewer	4.00	2.75	4.66	3.35
306	lin. ft. temporary box sewer	.35	.60	1.00	.25
27	manholes, 4½ ft. brick	85.00	80.00	75.00	60.00
9	manholes, 3½ ft. brick	75.00	75.00	60.00	55.00
4	manhole inverts, rebuilt	65.00	110.00	50.00	15.00
	Manhole, drop (lump sum)	100.00	120.00	25.00	25.00
15	manholes, etc., rebuilt	40.00	30.00	35.00	15.00
10	M. H. C. B., etc., covers, adjusted	5.00	5.00	10.00	5.00
12	catch basins, 1 inlet	65.00	75.00	50.00	58.00
4	catch basins, 2 inlets	75.00	80.00	60.00	68.00
700	lin. ft. 6-in. sewers relaid	.75	1.00	1.50	.90
100	lin. ft. 8-in. side sewers relaid	1.00	1.00	1.79	1.00
900	lin. ft. 8-in. side sewer connections	1.60	1.00	1.79	1.40
300	lin. ft. 3-in. tile drain	.15	.30	.73	.10
2,616	lin. ft. 24-in. c.-i. pipe, to be adjusted from std. cover to std. cover	2.25	.60	2.13	3.50
312	lin. ft. 6-in. c.-i. pipe taken up and relaid in new position	.75	1.00	1.00	.59
140	lin. ft. 12-in. c.-i. pipe removed and supported on bridge	1.25	1.40	1.10	2.25
1,500	lin. ft. 6-in. c.-i. pipe adjusted from std. cover to std. cover	.65	.50	1.00	.50
1,176	lin. ft. 6-in. c.-i. pipe, Class "A"	1.25	1.40	1.33	1.05
2	gate valves	250.00	245.00	352.00	275.00
9	hydrants to be reset	18.00	35.00	25.00	12.50
15	brick valve chambers (small)	30.00	37.00	25.00	20.00
3	brick valve chambers (large)	40.00	45.00	40.00	25.00
2	gate valves, 2-in.	10.00	5.00	7.50	4.25
325	lin. ft. 2-in. galvanized iron pipe	.35	.45	.60	.40
2	c.-i. valve boxes for 2-in. gate valves	8.00	6.00	25.00	3.00
150	lin. ft. ¾-in. galv. iron pipe, hyd. drn	.50	.35	.20	.16
25,000	lbs. special castings	.07	.07	.06	.05
900	lbs. hydrant extensions (9—24-in. × 6-in. horizontal)	.12	.08	.08	.13
200	lbs. steel for shackle rods	.06	.09	.12	.10
2	cu. yds. concrete blocking	10.00	5.50	10.00	10.00
200	lbs. vertical hyd. exten	.12	.08	.10	.13
173,000	lbs. structural steel	.05	.055	.0473	.055
1,339	lbs. reinforced bars	.06	.045	.06	.035
750	sq. yds. Clinton cloth	.60	.45	.50	.75
4,617	lbs. cast iron	.08	.06	.07	.06
834	cu. yds. concrete (1-3-6) abutments	8.50	9.50	9.00	6.90
67	cu. yds. concrete (1-2-4)	12.00	15.00	12.00	8.60
49	cu. yds. concrete (1-2-4), ornamental	20.00	50.00	20.00	14.00
240	lin. ft. concrete (hand rail)	3.00	1.50	2.50	1.40
25,278	lbs. buckle plates	.07	.055	.0429	.055
800	sq. yds. waterproofing	.25	.15	.40	.28
260	lin. ft. tile drain. 6-in	.40	.50	1.20	.18
132	lin. ft. granite curb	1.60	1.60	2.00	1.60
5	cu. yds. cable slot-concrete	12.00	10.00	20.00	10.00
308	sq. yds. paving brick	3.50	2.75	2.00	5.50
1,273	sq. yds. finishing	.50	.40	.20	.35
	Total	$162,247	$151,552	$167,830	$156.144

SEWERS.

West Allis, Wis.

Sealed proposals will be received until September 20, 1910, at 12 o'clock noon of said day for furnishing all materials and doing all the necessary work required to construct and lay sewers with all necessary manholes, connections, fittings, etc., in accordance with the plans and specifications, which plans and specifications are on file in the office of the City Clerk of the City of West Allis, Wisconsin, said sewer work covering approximately the following amounts of pipe sewer:

3,338 ft. 18" pipe.
1,034 ft. 15" pipe.
4,240 ft. 12" pipe.
9,634 ft. 10" pipe.
6,234 ft. 8" pipe.

and about 92 manholes.

Said sewers are distributed in about thirty different streets or parts of streets. Between 4,000 and 5,000 feet of the above sewer work is to be let in one contract and the remainder in a separate contract. Bids are asked per lineal foot for each size of pipe, including all manholes and fittings. All pipe above 12" diameter must be double strength with deep socket. The smaller contract must be completed Dec. 15, 1910, and the larger contract must be commenced within ten days of signing and completed May 15, 1911.

All bids must be accompanied by a contract with sureties as prescribed by the forms which will be furnished on application at the office of the City Clerk complete, with the exception of the signature on the part of the city.

Bonds must accompany such bids with sureties to justify in an amount equal to the sum mentioned in said contract; or in lieu thereof, a certified check or money must be deposited in an amount equal to five per cent. of the bid.

The right is expressly reserved to reject any and all bids.

All money or checks deposited will be returned to the unsuccessful bidders on award of contract.

The plans and specifications and profiles may be seen at the office of the undersigned.

L. F. FISH, City Clerk,
City of West Allis, Wis.

WATER-WORKS.

Haskell, Okla.

Sealed proposals will be received by the Board of Trustees of the Town of Haskell, Oklahoma, up to 2 o'clock P. M. of the 22nd day of September, 1910, for the furnishing of the materials and constructing a system of water-works for said town.

There will be required about 12,800 ft. of 6-in. cast-iron water pipes; about 17,200 ft. of 4-in. cast-iron water pipes; 25 fire hydrants; about 7,650 lbs. fitting; 18 valves and boxes; a galvanized iron pump house; 2 pumps of a combined capacity of 500 gals. per min.; one boiler; one steel tower and tank, 120 ft. max. water bin, 60,000 gals. capacity.

Bids will be received for furnishing any of the materials above or for constructing the works complete. Proposals must be addressed to the Town Clerk, Haskell, Okla., and must contain a certified check for the sum of 3 per cent. of the amount of bid.

Plans and specifications on file in the office of the Town Clerk or James T. Gates, Engineer, Wagoner, Okla.

Blank forms of proposals can be procured at the office of the Town Clerk or Engineer. The right is reserved to reject any and all bids.

C. W. MARSTON,
Acting Pres. Bd. Trustees.
E. A. RILEY, Town Clerk.
JAS. T. GATES, Engineer

SEWERS.

OFFICE OF CITY ENGINEER
Richmond, Va., Sept. 1, 1910.

Sealed proposals will be received at this office until 4 P. M., Thursday, September 15, 1910, for constructing the following sewers:

Dooley Ravine Sewer, Brick and Concrete. Length, 3,800 feet; Diameter, from 8 to 11 feet.

Virginia Avenue Sewer. Length, 3,000 feet; Diameter, 8 feet; Brick and Concrete (principally tunnel work in rock).

Sewer in Leigh Street to Government Road, Brick or Concrete. Length 2,600 feet; Diameter, 5 feet.

Plans, profiles and specifications can be seen at this office.

All parties desiring to bid are required to examine location on ground.

A certified check, payable to the City Treasurer, for $500.00, as a guarantee of proposal, must accompany each bid.

The Committee on Streets reserves the right to reject any and all bids.

CHAS. E. BOLLING,
City Engineer.

PUMPING OUTFIT AND STATION.

Sioux City, Iowa.

Bids will be received by the City Clerk of Sioux City, Iowa, until 9 A. M., September 17th, 1910, for the installation of a deep well turbine and centrifugal pump and station. Specifications may be had from the undersigned.

G. B. HEALEY,
Supt. Parks and Public Property.

U. S. ENGINEER OFFICE, Savannah, Ga., August 31, 1910.—Sealed proposals for dredging in harbor at Savannah, Ga., will be received at this office until 12 noon (Eastern standard time), October 1, 1910, and then publicly opened. Information on application. DAN C. KINGMAN, Col., Engineers.

U. S. ENGINEER OFFICE, Boston, Mass., Aug. 26, 1910.—Sealed proposals for dredging in Hingham Harbor, Mass., will be received here until 12 M., Sept. 26, 1910, and then publicly opened. Information on application. FREDERIC V. ABBOT, Col., Engrs.

U. S. ENGINEER OFFICE, Duluth, Minn., Aug. 23, 1910.—Sealed proposals for furnishing and placing granite riprap at the upper entrance to Portage Lake Canals (Keweenaw Waterway), Mich., will be received here until noon, Sept. 23, 1910, and then publicly opened. Information on application. GRAHAM D. FITCH, Lt. Col., Engrs.

Situations Open

SHOP INSPECTOR—Wanted, by up-to-date and growing structural shop at Montreal, man with shop and mill experience, and some technical training preferred. Permanent position and good opportunity. Men under age 25 and with less than three or four years' experience in this class of work need not apply. Give age, reference, experience, salary expected, and when able to report in first letter. STRUCTURAL STEEL CO., LTD., Montreal, Canada. 9-1t

Miscellaneous Wants

WANTED.
CABLEWAY
to rent or purchase.

Must be complete for sewer work; in good condition, with small size buckets, and available at once. Address, full description and quotations, "S. 9," Engineering News, New York. 9-1t

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